



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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COL Charles Griffin, Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC [REDACTED] Facility Supervisor, 505 East McKinney Street, Albertville, AL 35950.

SUBJECT: Industrial Hygiene Survey of the Albertville Armory.

1. References.

- a. Report completed 19 February 2007, Industrial Hygiene report for the Albertville Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [REDACTED] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the Albertville Armory.

b. Ms [REDACTED] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Discuss the high lead samples taken inside of the inactive indoor firing range converted into a Field Maintenance Shop (FMS) with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 1)

b. Discontinue all maintenance in the converted facility until the deactivated indoor firing range has been completely cleaned and properly renovated.

c. Follow the remainder of the contractor's recommendations on page 5 of the contractors report.

d. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact [REDACTED] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ [REDACTED] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [REDACTED] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

20 February 2007

MEMORANDUM FOR: Albertville Armory, ATTN: SFC [REDACTED] 505 East McKinney Street,
Albertville, Alabama 35950

SUBJECT: Industrial Hygiene Survey of Albertville National Guard Armory, Albertville,
Alabama

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 Albertville National Guard Armory, Albertville, Alabama

2. 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 the Albertville National Guard Armory, Albertville, Alabama on 14 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory. The building was visually examined and employees were interviewed for data related to the building and the operations performed. The illumination was measured and lead wipe samples were taken in various areas of the Armory.

3. Facility Description. This facility currently houses one unit. The facility houses administrative areas, one Supply Room, an Arms room, a drill hall and a deactivated indoor firing range currently being used as a FMS shop.

4. Findings.

a. The deactivated indoor firing range is converted into a Field Maintenance Shop (FMS). FMS #3, from Cullman converted the range into an annex FMS shop to facilitate vehicle maintenance. The shop has 2 technicians from the Cullman office and is used during drill weekends by the unit. Flammable and Hazardous materials are stored in wooden cabinets. A solvent tank manufactured by Rams Environmental Technologies is located in the range. Material Safety Data Sheets for chemicals used in the shop were not available. Two lead-acid batteries were found stored in the shop. A HUMVEE is stored in the range. An overhead garage door provides access for vehicles. A tailpipe exhaust system is not available in the range. Housekeeping is poor in the space. Hazardous and flammable materials are stored haphazardly in the space. The space is unheated; Propane space heaters are used to heat the space. Carbon Monoxide monitors are not available. A grinding machine is mounting on a table in the space. The range backstop, target retrievers, and all items associated with a fire range have been removed. The pit area is used as for storage of excess field equipment.

b. Illumination was surveyed throughout the building. The lighting in the boiler room is not explosion proof. An incandescent bulb with a cover is used in the room. A diagram of illumination measurements can be found within the enclosure of this report. The areas listed below are below the standards required in reference f. The findings are as followed in Foot-candles (FC):

Table 1

AREA/LOCATION	MEASURED FC	REQUIRED FC
Recruiting office	17.4-29.8	50-75
Locker room	6.6-13.6	10-15
Dispatch office	6.7-8.4	50-75

LAE Consulting
1218 Scattered Pines Court, Severn, Maryland 21144
Telephone: (410) 561-2717

Page 2

SUBJECT: Industrial Hygiene Survey of Albertville National Guard Armory, Albertville, Alabama

c. Seventeen Lead wipe samples and one blank were taken in various locations throughout the deactivated range and the Armory. Sample locations and results are in the table 2 below.

Table 2

Sample #	Location	Results
1	Floor center of pit	788 ug/ft ²
2	Backstop Right side 7 ft up	4310 ug/ft ²
3	Backstop Left side 4 ft up	5320 ug/ft ²
4	Floor in front of pit	228 ug/ft ²
5	Right wall 5.5 ft up	78 ug/ft ²
6	Center of range floor 12 feet from garage door	35 ug/ft ²
7	Left wall 3 feet up	BRL
8	Floor at entrance to range 1 ft from door	221 ug/ft ²
9	Top of refrigerator in kitchen	BRL
10	Top of cabinet near return air grill in kitchen	28 ug/ft ²
11	Center of drill hall floor	BRL
12	Floor 2 ft outside supply room door	BRL
13	Random Camo nets taken from range	BRL
14	Top of Dr. Pepper machine	329
15	Floor 1/2 foot from left side of Map board	BRL
16	Return air grill in Read. NCO office	40
17	Supply air grill in Read. NCO office	BRL
Blank	Blank	BRL

*BRL indicates below reporting limits

d. Two Air Handling units (AHU) are located in the boiler room. Excess field supplies and equipment is stored in front of AHU #1, limiting the accessibility to perform maintenance on the units. The air filter location could not be determined. Filters may be located in the ceiling of the Armory. The supply and return air grills have an accumulation of dust. Lead wipe samples taken on the return air grill in the Readiness NCO's office showed an elevated level of Lead. Heating of all non administrative areas is terminated, per a statewide Energy conservation initiative, directed by the state facility engineering office. The facility currently uses the Propane heaters, provided by the units MTOE to heat the Drill Hall and deactivated range. Carbon Monoxide monitors are not available for the rooms.

e. Stained ceiling tiles were noticed in the Commander's office. The facility received a total re-roofing 3 years ago.

f. Mouse droppings were observed in the kitchen. The kitchen is space is used for catered events.

SUBJECT: Industrial Hygiene Survey of Albertville National Guard Armory, Albertville, Alabama

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Non-Responsive

LAE Consulting

5 Encl

1. Building Diagram
 2. HHIM
 3. Facility Photos
 4. Laboratory Results
 5. MSDS
- CF: Alabama

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

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SUBJECT: Industrial Hygiene Survey of Albertville National Guard Armory, Albertville, Alabama

6. Recommendations.

a. Recommend that facility personnel discontinue all vehicle maintenance activity in the range until guidance and /or written permission from the state Occupational health office and the Facility engineering office is provided. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.

(RAC 2)

b. Install an explosion proof lighting system in the Boiler room. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If movies are available, recommend upgrading the lighting fixtures to meet the recommended requirements.

(RAC 3)

c. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.

(RAC 2)

d. Recommend a cleaning of the air ducts in the facility. In the interim, clean the supply and return air grills throughout the facility. Contact the state facility engineering office for assist in located the filters for the AHU. Ensure filters are changed every 30 days. (RAC 2)

e. Remove and replace all stained ceiling tiles. (RAC 3)

f. Contact the state or local Pest control office for assistance in eliminating the mice in the facility. (RAC 2)

7. Mr. Gary Ziegler
1218 Locust Street, Suite 100, Birmingham, AL 35204
Telephone: (205) 531-2111

Page 5

EXIT

Mess
Storage

336-50.8
mess/kitchen

Trailer
Hall

30.6 FE
Storage Room
47.2 FE

30.6 FE

10000 sq ft
Office
Disposal 67-8-4
IDALG 248
Landing

13.6
Landing
Publication

6.6
Office

44.4
Office
13.4

41.4
Kitchen
Landing

EXIT

17.4 FE CDL's Office	Classroom 55.8 FE	2nd Barracks Office 17.4	Head of 35.0
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EXIT

20000 sq ft	44.4 FE Storage Office	44.4 FE Room
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EXIT

DECK TO 4TH FLOOR
VEHICLE MAINT AREA

Albertsville Airway
Lighting Survey
C/O 27th Squad

ASSEMBLY PT #1



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 27, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717
FAX: (410) 551-7215

RE: ALBERTVILLE ARMORY

Dear

Non-Responsive

Order No.: 0702B27

Analytical Environmental Services, Inc. received 18 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.
- AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

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

Director of Project Management



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: 0102627

Life Consulting

**LAB & FIELD FILES OF
 SEVERN, MD 21144**

ANALYSIS REQUESTED

Visit our website
www.aesatlanta.com
 to check on the status of
 your results, place bottle
 orders, etc.

No. of Containers

PHONE: **410.551.2717**

FAX: **410.551.7315**

SAMPLE ID: **[REDACTED]**

SKIN: **[REDACTED]**

SAMPLE ID

SAMPLED

Grab

Composite

Matrix
(See codes)

PRESERVATION (See codes)

RELEASES

1 **Pb BLANK**

DATE: **11/20/07**

Time

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152

2 **Pb 1**

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3 **Pb 2**

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4 **Pb 3**

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5 **Pb 4**

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6 **Pb 5**

11

7 **Pb 6**

11

8 **Pb 7**

11

9 **Pb 8**

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10 **Pb 9**

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11 **Pb 10**

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12 **Pb 11**

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13 **Pb 12**

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14 **Pb 13**

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DELIVERED BY

DATE/TIME

DATE/TIME

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ANALYTICAL ENVIRONMENTAL SERVICES, INC.
 3785 Presidential Parkway, Atlanta GA 30340-3704
AES TEL: (770) 457-8177 / TOLL-FREE: (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order: **0702627**

LAE Consulting

**1518 Scotland Place CT
 SEBEL, MD 21144**

PHONE: **410.551.2715**
 FAX: **410.551.7915**

ANALYST: **[REDACTED]**
 DATE: **[REDACTED]**

SAMPLE ID

1 **Pb14** DATE: **11/20/07** TIME: **7** Matrix: **0**

2 **Pb15** " " " " " "

3 **Pb16** " " " " " "

4 **Pb17** " " " " " "

BEST AVAILABLE COPY

5 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

6 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

7 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

8 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

9 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

10 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

11 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

12 **[REDACTED]** DATE: **11/20/07** TIME: **1240**

ANALYSIS REQUESTED

Visit our website
www.aesatlanta.com
 to check on the status of
 your results, place bottle
 orders, etc.

PRESERVATION (See codes)

REMARKS

No # of Containers

PROJECT NAME
Albertville Amory

SITE ADDRESS
Albertville ALABAMA
1518 Scotland Place CT
SEBEL, MD 21144

INVOICE TO
NO BUREAU - 1715
COLLECT FROM, GA

STAT (Pb14-Pb17)
 Standard 5 Dayroom Temp
 2 Business Day Room
 Next Business Day Room
 Same Day Room (with req)
 Other _____

DATE: **11/20/07** PAGE: **2** OF **2**

BEST AVAILABLE COPY

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client LAC - ConocoPhillipsWork Order Number 0702827Checklist completed by mlj
SignatureDate 2/2/07Carrier name FedEx ☐ UPS ☐ Courier ☐ Client ☐ US Mail ☒ Other ☐Shipping container/cooler in good condition? Yes ☒ No ☐ Not PresentCustody 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? ^{not blank?} ~~not blank?~~ Yes ☒ No ☐Cooler #1 Amber 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 ☐ NoWater - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒Adjusted? ☐Checked by ☐Sample Condition Good ☒ Other (Explain) ☐(For diffusive samples or AHA 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

C:\Documents and Settings\Chemist\Desktop\CHECKLISTS.rtf

Analytical Environmental Services, Inc.

Date: 27-Feb-07

CLIENT: LAE Consulting
Project: ALBERTVILLE ARMORY
Lab Order: 0702B27

CASE NARRATIVE

The COC was not signed when it was relinquished.

The collection date was not listed on the sample containers.

Samples should be analyzed for Lead per ~~Non-Responsive~~ on 2/22/07.

Analytical Environmental Services, Inc.

Date: 2/27/2007

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: LAE Consulting
 Project: ALBERTVILLE ARMORY
 Delivery Order:
 PO No:

Lab Order: 0702B27
 Date Received: 2/21/2007 12:40 PM
 Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0702B27-001A	Pb BLANK	BLK	µg/lb	20	1	2/14/2007	2/21/2007	JY
0702B27-002A	Pb1	788	µg/lb	20	1	2/14/2007	2/23/2007	JY
0702B27-003A	Pb2	4510	µg/lb	170	8.49	2/14/2007	2/23/2007	JY
0702B27-004A	Pb3	5320	µg/lb	195	9.77	2/14/2007	2/23/2007	JY
0702B27-005A	Pb4	228	µg/lb	20	1	2/14/2007	2/23/2007	JY
0702B27-006A	Pb5	78	µg/lb	20	1	2/14/2007	2/23/2007	JY
0702B27-007A	Pb6	75	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-008A	Pb7	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-009A	Pb8	21	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-010A	Pb9	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-011A	Pb10	78	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-012A	Pb11	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-013A	Pb12	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-014A	Pb13	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-015A	Pb14	329	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-016A	Pb15	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-017A	Pb16	40	µg/lb	20	1	2/14/2007	2/26/2007	JY
0702B27-018A	Pb17	URL	µg/lb	20	1	2/14/2007	2/26/2007	JY

Qualifiers: URL = Not Detected at the Reporting Limit

DF = Dilution Factor

Results are blank corrected where applicable

CLIENT: LAE Consulting

Work Order: 0702B27

Project: ALBUQUERQUE ARMORY

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPE_MET_AA

Sample ID: MB-83148	SampleType: MBLK	TestCode: WIPE_MET_A	Units: ug, Total	Prep Date: 2/23/2007	RunNo: 99778						
Client ID:	Batch ID: 83118	TestNo: N7082		Analysis Date: 2/23/2007	SeqNo: 2001797						
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	BRL	20.0									

Sample ID MB-03163	SampleType MBLK	TestCode WIPE_MET_A	Units ug, Total	Prep Date 2/24/2007	RunNo 99841						
Client ID	Batch ID 83163	TestNo: N7082		Analysis Date 2/26/2007	SeqNo 2003077						
Analyte	Result	PQL	SPK value	SPK Ref val	%REC	LowLimit	HighLimit	RPD Ref val	%RPD	RPQLimit	Qual
Lead	BRL	20.0									

Sample ID: LCS-83118	SampleType: LCS	TestCode: WIPE_MET_A	Units: ug, Total	Prep Date: 2/23/2007	RunNo: 99778						
Client ID:	Batch ID: 83118	TestNo: N7082		Analysis Date: 2/23/2007	SeqNo: 2001798						
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	1032	41.8	957	0	108	80	120	0	0	0	

Sample ID	LCS-83163	Sample type	LCS	TestCode	WIPE_MET_A	Units	ug, Total	Prep Date	2/24/2007	RunNo	99841												
Client ID		Batch ID	83163	TestNo	N7082			Analysis Date	2/26/2007	SeqNo	2003073												
Analyte		Result	987.7	PQL	40.4	SPK value	957	SPK RefVal	0	%REC	103	LowLimit	80	HighLimit	120	RPD RefVal	0	%RPD	0	RPDLimit	0	Qual	
Lead																							

Sample ID: LCS0-83118	SampleType	LCSD	TestCode	WIPE_MET_A	Units	µg, Total	Prep Date	2/23/2007	RunNo	99779	
Client ID	Batch ID: 83118		TestNo	N7082			Analysis Date	2/23/2007	SeqNo	2001800	
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	1004	41.8	957	0	105	80	120	1032	9.73	25	

Qualifiers: B Analyte detected in the associated Method Blank
 J1 Holding times for preparation or analysis exceeded
 R RPD outside accepted recovery limits
 S Spike Recovery outside accepted recovery limits
 T Value above quantitation range
 N Analyte not NIOSH certified

LAL Consulting

0702827

ALBERTVILLE ARMORY

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPF_MET_AA

Sample ID	LCSD-83103	SampleType	LCSD	TestCode	Wipe_MET_A	Units	μg, Total	Prep Date	2/24/2007	RunNo	00841
Client ID				TestNo	MT002			Analysis Date	2/28/2007	SeqNo	2002075
Analysis	Result	POL	SPK value	SPK RelVal	%REC	LowLimit	HighLimit	RPD RelVal	%RPD	RPDLimit	Q.m
8303	999.0	47.0	957	0	104	0.0	170	987.7	0.74	25	

1: Value above 5 indicates a negative
N: Any value not N.E.M. is omitted

- 4. Analytic detected below quantitative limits
- 5. Spike Recovery: substance accepted against limits

N Analyte detected in the associated Method Blank
H Holding times for preparation of new jars exceeded
R RPT methods accepted recovery limits



Albertsville Armory, Albertsville, Alabama



View rusting on the metal roofing material above the drop ceiling in the office of the commander



View of the stained ceiling tiles in the commander's office



View of rodent droppings in the kitchen



View of rodent droppings in the kitchen



View of the AHU 2 in the



View of the storage of field equipment and supplies around AHU 1



View of the non-explosion proof lighting in the AHU room



View of the converted range now being used as a maintenance shop



View of the converted range now being used as a maintenance shop



View of the pit area and backstop behind the wooden shelving



View of the hazardous and flammable materials stored on a wooden cabinet in the converted range



View of the hazardous and flammable materials stored on a wooden cart in the converted range



View of batteries improperly stored near an electrical outlet in the converted range



Put your text here!



View of flammables and hazardous materials stored in a wooden cabinet



View of solvent tank located in the converted range



Lead wipe sample 1, located on the floor of the range pit



Lead wipe sample 2, located on the back stop of the range pit



Lead wipe sample 3, located on the left side of the back stop



Lead wipe sample 4, located on the floor 7 ft from the pit



Lead wipe sample 5, located on the right wall downrange 5.5 feet up



Lead wipe sample 6, located center of range floor



Lead wipe sample 7, located on the left wall 3 ft up



Lead wipe sample 8, located 1 ft from range entrance on the floor



Lead wipe sample location 9, located on top of the refrigerator in the kitchen



Lead wipe sample 10, top of kitchen cabinet near return air grill



Lead wipe sample 11, Center of drill hall floor



Lead wipe sample 12, located on the floor 2 ft outside of supply room



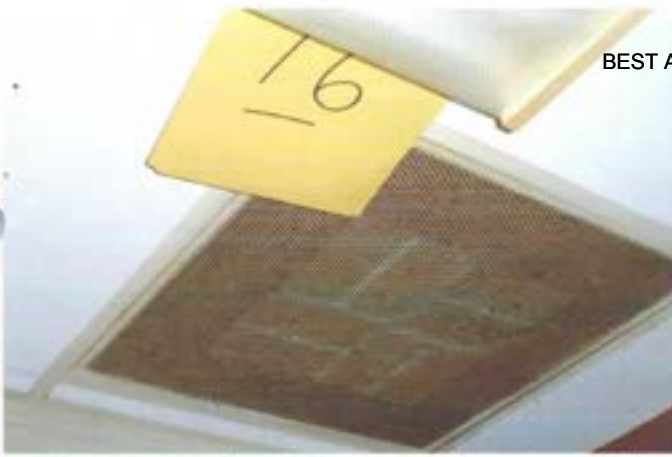
Lead wipe sample 13, located on the camouflage netting located in the drill hall, netting taken from the range



Lead wipe sample 14, located on top of the soda machine in the drill hall



Lead wipe sample 15, located on the left side floor of the drill hall



Lead wipe sample 16, located at the return air grill in the readiness NCO office



Lead wipe sample 17, located at the supply air grill in the Readiness NCO office

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

ALC LOC 31000		INSTALLATION ALBERTSVILLE ARMORY		BLDG/RM NO 505 EAST MCKINNEY STREET ALBERTSVILLE, ALABAMA 35950	
LOCATION/COE AA		OPERATION/COE ADD			
SURVEY DATE 14 FEB 07		EVALUATOR AAE CONSULTING			
MACOM/COE NG		SUBMACOM/COE XX		SUPERVISOR SFC SAEY	
TELEPHONE/DSN NO. 256 572.3444		UNIT/ORGANIZATION ALBERTSVILLE ARMORY		RAC 4	FREQUENCY (hrs/day) +8 hrs NO OTHER 2
NO CIV(S)	NO MIL	NO CONTRACTORS	NO LOC(S)		

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE PANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
CONTROLS PRESENT	6 2-112	FC	50-100	UNACOMM

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

GLASSES	R/U	RESPIRATOR	R/U	HOODING	R/U	MANUFACTURER	R/U
ACID		AIRLINE					
COLD SURFACES		AIRSIZE BEASTING HOOD					
HOT SURFACES		DISPOSABLE					
POISON AGENTS		FULL FACE AIR PURIFYING					
OX		1/2 FACE AIR PURIFYING					
SOLVENTS		1/4 FACE AIR PURIFYING					
SURGICAL GLOVES		SUFT CONTAINED					

EYES/FACE	R/U	HEARING	R/U	BODY	R/U	HEADWEAR	R/U
CHEMICAL SPLASH	X	CANAL CAPS		APRONS	X	COLD WEATHER BOOTS/MATS	
FULL FACE SHIELD		EARPLUGS	X	COLD WEATHER CLOTHING		HARD HATS	
CHEMICAL SAFETY		EARPLUGS		COVERALLS		IMPERMEABLE BOOTS	
SAFETY/IMPACT	X	MUFFS	X	FULL BODY SUIT		SAFETY/CONDUCTIVE SHOES	
WELDING HELMET		MUFF/EARPLUG COMBO		FLAT REFLECTIVE VEST/SUIT		SAFETY/CONDUCTIVE SHOES	X
		MUFF/EARPLUG W/NOISE UNIT		SAFETY BELT/TAMING			

SECTION 4: HAZARD INVENTORY DATA

CAS CODE	HAZARD DESCRIPTION	PAC	EPC
POLIGHTIN	INADEQUATE LIGHTING	3	

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY

SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

LOC 01000		INSTALLATION ALBERTSVILLE ARMORY		BLDG/RM NO. 505 EAST MCKINNEY STREET ALBERTSVILLE ALABAMA 35950	
LOCATION/CODE SA		OPERATION/CODE SAH			
SURVEY DATE 14 FEB 07		EVALUATOR LAE CONSULTING			
MACOM/CODE ING		SUBMACOM/CODE		SUPERVISOR SFC SAEY	
TELEPHONE/DSN NO 256 572 3444		UNIT/ORGANIZATION ALBERTSVILLE ARMORY		RAC 4	FREQUENCY (hrs/day) +8 hrs NO OTHER 2
NO CIV(S)	NO MIL	NO CONTRACTORS	NO LOC(S)		

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
ROUTING	30.6	FC	50-100	ACOMM

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

GLOVES	RESPIRATOR	PROTECTIVE NO.	MANUFACTURER	RAU
ACID	AIR LINE			
COLD SURFACES	ABRASIVE BLASTING HOOD			
HOT SURFACES	DISPOSABLE			
HAZARDOUS AGENTS	FULL FACE AIR PURIFYING			
DRUGS	1/2 FACE AIR PURIFYING			
SOLVENTS	3/4 FACE AIR PURIFYING			
SURGICAL GLOVES	SELF CONTAINED			

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

SECTION 4: HAZARD INVENTORY DATA

CAS CODE	HAZARD DESCRIPTION	PAC	EPC
7439-92-1	Lead, inorganic, dust & fumes	3	

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SE X	SSN	CATEGO RY

SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

LOC 01000	INSTALLATION ALBERTSVILLE ARMORY	BLDG/RM NO. 405 EAST MCKINNEY STREET ALBERTSVILLE, ALABAMA 35950
LOCATION/CODE MN	OPERATION/CODE TAT	
SURVEY DATE 12 FEB 07	EVALUATOR LAF CONSULTING	
MACOM/CODE NG	SUBMACOM/CODE	SUPERVISOR SFC SAEY
TELEPHONE/DSN NO. 256 572.3444	UNIT/ORGANIZATION ALBERTSVILLE ARMORY	RAC 4 FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS
		NO. LOC(S)
		NO. OTHER 2

SECTION 2: FACILITY DATA

JAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
TRNG	67.890	FC	50-100	UNACOMM.

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

GLOVES	RESPIRATOR	NIOSH TC NO.	MANUFACTURER
ACID	AIR LINE		
COLD SURFACES	ABRASIVE BLASTING MOOD		
HOT SURFACES	DISPOSABLE		
NEB. AGENTS	FULL FACE AIR PURIFYING		
OIL	1/2 FACE AIR PURIFYING		
SOLVENTS	1/4 FACE AIR PURIFYING		
SURGICAL GLOVES	SELF CONTAINED		

EYES/FACE	HEARING	BODY	HEAD/FIT
CHEMICAL SPLASH	CANAL CAPS	APRONS	COLD WEATHER BOOTS/SPATS
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/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	3	
PONOISECO	NOISE, CONTINUOUS	2	
COLUBEOIL	LUBE OIL GREASE, HYDRAULIC FLUID	2	
630-080-0	CARBON MONOXIDE	2	
CODIESELF	DIESEL FLUID	2	

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY

SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet



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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COL [Non-Responsive] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC [Non-Responsive] Facility Supervisor, 1644 Cullman Road, Arab, AL 35016.

SUBJECT: Industrial Hygiene Survey of the Arab Armory.

1. References.

- a. Report completed 19 February 2007, Industrial Hygiene report for the Arab Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC. [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the Arab Armory.

b. Ms. [Non-Responsive] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 1)

b. Follow the remainder of the contractor's recommendations on page 5 of the contractors report.

c. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

d. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ. [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC. [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

23 February 2007

MEMORANDUM FOR: Arab Armory, ATTN: SFC [REDACTED] 1644 Cullman Road, Arab, Alabama 35016

SUBJECT: Industrial Hygiene Survey of Arab National Guard Armory, Arab, Alabama

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 Arab National Guard Armory, Arab, Alabama

2. 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 the Arab National Guard Armory, Arab, Alabama on 15 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory. The building was visually examined and employees were interviewed for data related to the building and the operations performed. The illumination was measured and lead wipe samples were taken in various areas of the Armory.

3. Facility Description. The facility houses administrative areas, Supply Room, an Arms Rooms and a drill hall and a deactivated indoor firing range.

4. Findings.

a. Stained ceiling tiles and blistering paint was observed in the hallway and drill hall. Water may be infiltrating from the flat roof of the building. There are no significant problems with the gutters along the exterior of the building. There is some exposed wood at the header of the roof, below the metal flashing.

b. A heavy accumulation of dust and dirt are on the supply and return air grills throughout the facility. The facility has two air handling units. Disposable fiberglass filters are in each unit. The facility employees change the filters frequently.

c. Illumination was surveyed throughout the building. A diagram of illumination measurements can be found within the enclosure of this report. The areas listed below are below the standards required in reference f. The findings are as followed in Foot-candles (FC):

Table 1

AREA/LOCATION	MEASURED FC	REQUIRED FC
NBC storage	5.9-19.8	20-30
Classroom 1-2	39.9-59.2	50-75
Supply office	30.5	50-75
Supply room	8.3-16.8	20-30
Kitchen	19.2	50-75

d. Mouse droppings were observed in the kitchen. The readiness NCO stated that pest control had been in and place bait stations and traps in the kitchen and outside the facility.

SUBJECT: Industrial Hygiene Survey of Arab National Guard Armory, Arab, Alabama

e. An active termite colony is located in the Supply storage room. Termites have caused extensive damage to the wooded storage shelves and paper products stored in and on the shelves. An inspection of the exterior of the building, determined that the termite colony started from the landscaping timbers and mulch located in the flowerbed. Wooden landscape timbers shown evidence of termite damage. One wood shelf was moved during the survey to observe the extent of damage. A strong mildew odor emitted from behind the shelf with marked dampness; residual mud tubes were present behind and within the shelving units; and wood had extensive damage.

f. A deactivated indoor firing range is currently being used as a locker room and a weight room. Several tall wooden bookcases divide the two spaces. The weight area is located at the bullet trap end of the range. Wall lockers line the perimeter wall and center of the range. Wall lockers are assigned to unit personnel to store their TA-50. The target carriers and firing lanes are removed. The sand is still present in the pit. There was no documentation that the range was cleared prior to conversion to a storage area. Seventeen lead wipe samples and one blank were taken in various locations throughout the deactivated range and the Armory. One bulk sand sample was obtained from the range pit. Sample locations and results are in the table 2 below.

Table 2

Sample #	Location	Results
1	Backstop right side 6 ft up	455 ug/ft ²
2	Backstop left 6 ft up	15400 ug/ft ²
3	Floor at pit	4050 ug/ft ²
4	Leg press bench	30 ug/ft ²
5	Top of wall locker #161 left center	64 ug/ft ²
6	Floor range near Baker's wall locker	184 ug/ft ²
7	Table in range left side near exit	BRL
8	Floor outside range 1 ft	36 ug/ft ²
9	Top of refrigerator in kitchen storage	21 ug/ft ²
10	Lower shelf of food prep table	BRL
11	Top of Coke machine	98 ug/ft ²
12	Center of drill hall floor	BRL
13	Randomly selected table used to clean weapons	BRL
14	Supply air grill in orderly room	BRL
15	Supply side of air filter in AHU 2	BRL
16	Supply side of air filter in AHU 1	BRL
18	Return air grill in supply NCO office	BRL
Bulk 2	Sand from the pit	2660 mg/kg
Blank	Blank	BRL

*BRL indicates below reporting limits

SUBJECT: Industrial Hygiene Survey of Arab National Guard Armory, Arab, Alabama

g. Two solvent tank manufactured by Rams Environmental Technologies is located in the deactivated indoor firing. A Material Safety Data Sheet (MSDS) for the solvent was not available. The solvent is used for weapons cleaning.

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Non-Responsive

LAE Consulting

5 Encl

1. Building Diagram
 2. HHIM
 3. Facility Photos
 4. Laboratory Results
 5. MSDS
- CF: Alabama

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

Page 4

SUBJECT: Industrial Hygiene Survey of Arab National Guard Armory, Arab, Alabama

6. Recommendations.

a. Recommend the state facility engineers inspect the roof for water intrusion areas; repair the roof if leaks are found; replace all stained ceiling tiles; Recommend the state Safety and Occupational Health office evaluate the blistering paint to determine if mold is present and to provide assistance if remediation is needed.

(RAC 3)

b. Recommend a cleaning of the air ducts in the facility. In the interim, clean the supply and return air grills throughout the facility. Ensure filters are changed every 30 days. (RAC 4)

c. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If monies are available, recommend upgrading the lighting fixtures to meet the recommended requirements.

(RAC 3)

d. Contact the state or local Pest control office for assistance in eliminating the mice in the facility. (RAC 2)

e. Contact a local pest control company that specializes in termite control. Consult with the state pest control office for assistance in locating a certified pest control company. (RAC 2)

f. Recommend that facility personnel discontinue all activity in the range until guidance and/or written permission from the state Occupational health office and the Facility engineering office is provided. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.

(RAC 2)

g. Acquire and post the MSDS for the solvent near the solvent tank. Ensure all personnel follow manufacture's recommendations when using the product. Ensure Personal Protective Equipment (PPE) appropriate for the solvent is provided and the wear is enforced. Contact the state Occupational Health office for assist in obtaining the correct PPE for the solvent. (RAC 2)

BE 20020

W. A. R. R.

ASSEMBLY AREA

STRAUGH
-GAD

WED: 05/01/93

RED BOOK WITH NUMBER INDICATES
PAGE EXCLUDED

$$\{2, 4, 5\}$$

Aktiv: Häufigkeit LGFF nach Geschlecht

$$\begin{bmatrix} 1 & 2 & 3 \\ 2 & 3 & 4 \\ 3 & 4 & 5 \end{bmatrix}$$



AES

ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 26, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717
FAX: (410) 551-7215

RE: ARAB ARMORY

Order No.: 0702B18

Dear Non-Responsive

Analytical Environmental Services, Inc. received 18 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.
- AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

These results relate only to the items tested. This report may only be reproduced in full and contains 6 total pages (including cover letter).

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

Sincerely,

Non-Responsive

Director of Project Management

Analytical Environmental Services, Inc.

Sample Cooler Receipt Checklist

Client LAKE CONSULTINGWork Order Number 070208Checklist completed by J. J. [Signature]Date 2/2/07Carrier name: FedEx UPS Courier Client: US Mail ☒ OtherShipping 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 ☒Containers Empty Blank temperature in compliance? ^{37.1 to 21.2 deg} Yes ☒ NoCooler #1 Empty Cooler #2 _____ Cooler #3 _____ Cooler #4 _____ Cooler #5 _____ Cooler #6 _____Chain of custody present? Yes ☒ NoChain of custody signed when relinquished and received? Yes ☐ No ☒Chain of custody agrees with sample labels? Yes No ☒Samples in proper container/closure? Yes ☒ NoSample containers intact? Yes ☒ No ☐Sufficient sample volume for indicated test? Yes ☒ NoAll samples received within holding time? Yes ☒ NoWas TAT marked on the CDC? Yes ☒ NoProceed with Standard TAT as per project history? Yes ☐ No ☐ Not Applicable ☒Water - VOA vials have zero headspace? No VOA vials submitted ☒ Yes NoWater - pH acceptable upon receipt? Yes No Not Applicable ☒

Adjusted? _____ Checked by _____

Sample Condition: Good ☒ Other/Explain: _____(For duplicate samples or AHA lead) Is a known blank included? Yes ☒ No

Case Narrative for resolution of the Non-Conformance

* Samples do not have to comply with the given range for certain parameters.

C:\Documents and Settings\Chemist\Desktop\CHL-CKL181.rtf

Analytical Environmental Services, Inc.

Date: 26-Feb-07

CLIENT: LAE Consulting
Project: ARAB ARMORY
Lab Order: 0702B18

CASE NARRATIVE

The COC was not signed when it was relinquished.

The collection date was not listed on the sample containers. The collection date listed for the first sample on the COC was used as the collection date for all samples.

Samples should be analyzed for Lead per Non-Responsive on 2/22/07.



Date: 2/26/2007

TOTAL LEAD IN WIPE SAMPLES N7082

CLIENT: LAE Consulting
Project: ARAB ARMORY
Delivery Order:
PO No:

Lab Order: 0702B18
Date Received: 2/21/2007 12:40 PM
Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DP	Date Collected	Date Analyzed	Analyst
0702B18-001A	BLANK	BLK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-002A	Pb1	155	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-003A	Pb2	35400	ug/f ²	1030	61.37	2/15/2007	2/23/2007	JY
0702B18-004A	Pb3	4050	ug/f ²	125	2.79	2/15/2007	2/23/2007	JY
0702B18-005A	Pb4	30	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-006A	Pb5	64	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-007A	Pb6	164	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-008A	Pb7	336	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-009A	Pb8	36	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-010A	Pb9	21	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-011A	Pb10	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-012A	Pb11	95	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-013A	Pb12	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-014A	Pb13	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-015A	Pb14	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-016A	Pb15	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-017A	Pb16	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY
0702B18-018A	Pb17	BRK	ug/f ²	20	1	2/15/2007	2/23/2007	JY

Qualifying:

BRK = Not Detected at the Reporting Limit

DP = Data Precision

Results are Blank Corrected where applicable.

Page 1 of 1

Analytical Environmental Services, Inc.

Date: 26-Feb-07

CLIENT: LAE Consulting

Work Order: 0702B18

Project: ARAD ARMORY

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPE MET_AA

Sample ID MB-83073	SampleType MBLK	TestCode WIPE_MET_A	Units µg. Total	Prep Date 2/22/2007	RunNo 99736						
Client ID	Batch ID: 83073	TestNo: N7082		Analysis Date 2/23/2007	SeqNo 2000788						
Analyte	Result	POL	SPK Value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual

Sample ID MB-83100	Sample Type MBLK	TestCode WIPE_MET_A	Units µg. Total	Prep Date 2/22/2007	RunNo 98746						
Client ID	Batch ID: 83100	TestNo N7082		Analysis Date 2/23/2007	SeqNo 2001170						
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual

Sample ID: LCS-83073	SampleType LCS	TestCode WIPE_MET_A	Units µg. Total	Prep Date. 2/22/2007	RunNo 99736						
Client ID	Batch ID B3073	TestNo N7082		Analysis Date 2/23/2007	SeqNo 2000788						
Analyte	Result	POL	SPK value	SPK Ref Val	%Rt-C	LowLimit	HighLimit	RPD RefVal	%RPD	R+DLimit	Qual
Lead	981.6	41.2	957	5.62	102	80	120	0	0	0	

Sample ID LCS-83100	SampleType LCS	TestCode WIPE_MET_A	Units µg. Total	Prep Date 2/22/2007	RunNo 99746						
Client ID	Batch ID: 83100	TestNo N7082		Analysis Date 2/23/2007	SeqNo 2001173						
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	Low limit	High limit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	990.9	40.8	957	0	104	80	120	0	0	0	

Sample ID	LCSD-83073	SampleType	LCSD	TestCode	WIPE_MET_A	Units	µg. Total	Prep Date	2/22/2007	RunNo	99736		
Client ID		Batch ID	83073	TestNo	N7082			Analysis Date	2/23/2007	SeqNo	2000791		
Analyte		Result		POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	SPOLimit	Qual
Lead		1054		44.2	957	5.82	110	80	120	981.6	7.09	25	

Qualifiers: 1. Analyte detected in the associated Method Blank
 2. Holding times for preparation or analysis exceeded
 3. KRT outside accepted recovery limits
 4. Below Reporting Limit
 5. Analyte detected below quantitation limits
 6. Spike Recovery outside accepted recovery limits
 7. Value above quantitation range
 8. Analyte not NPL AC certified

CLIENT: LAE Consulting
 Work Order: 0702B18
 Project: ARAB ARMORY

ANALYTICAL QC SUMMARY REPORT

TestCode: WIFE_MET_AA

Sample ID: LC50-03100	Sample Type: LC50	TestCode: WIFE_MET_AA	Units: µg Total	Prep Date: 2/22/2007	RunNo: 98746							
Client ID	Batch ID: 03100	TestNo: N7082		Analyse Date: 2/23/2007	SeqNo: 2001174							
Analyte	Result	PQL	SPK value	SPK RefVal	%R-C	100	80	100	980	%RPO	RPOLimit	Qual
Lead	0.042	42.2	0.57	0	100	80	100	980	5.04	5.04	25	

Qualifiers:	D	Analyte detected in the associated Method Blank	H	Holding times for preparation or analysis exceeded	R	RPT outside accepted recovery limits	Below Reporting Limit	Analyte detected below quantization limits	Spiked Recovery outside accepted recovery limits	Value above quantization range	Analyte not NPLAL certified

Date: 26-Feb-07

Analytical Environmental Services, Inc.

CLIENT: LAF Consulting
 Lab Order: 0702B60
 Project: Alabama
 Lab ID: 0702B60-002A

Client Sample ID: BULK ARAB Pb2
 Tag Number:
 Collection Date: 2/15/2007
 Matrix: SOIL

Analyses	Result	Limit Qual	Units	BatchID	DF	Date Analyzed
METALS, TOTAL		SW8010B		(SW3050B)		Analyst: BB
Lead	2600	48 *	mg/Kg-dry	83025	10	2/28/2007 11:54:15 AM
PERCENT MOISTURE		D2218				Analyst: CG
Percent Moisture	1.10	0	wt%		1	2/23/2007 1:20:00 PM

Qualifier:

* Value exceeds Maximum Contaminant Level
 BRL Below Reporting Limit
 H Holding time for preparation or analysis exceeded
 N Analyte not NELAP certified
 Rpt Limit Reporting Limit

D Analyte detected in the associated Method Blank
 E Value above quantitation range
 I Analyte detected below quantitation limits
 P NELAP analyte certification pending
 S Spike Recovery outside accepted recovery limits

Page 2 of 3

ANALYTICAL ENVIRONMENTAL SERVICES, INC.



February 26, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717

FAX (410) 551-7215

RE: Alabama

Order No.: 0702B60

Dear Non-Responsive

Analytical Environmental Services, Inc. received 3 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.
- AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

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

Director of Project Management

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client LTE ConsultingWork Order Number 0702 BWDChecklist completed by M. J. Smith Date 2/26/07Carrier name: FedEx ☐ UPS ☐ Courier ☐ Client ☐ U.S. 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? ^{m 2/26/07} Yes ☒ No ☐Cooler #1 None 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 AHA leads) 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.

C:\Documents and Settings\Chemist\Desktop\CHECKLIST.txt

Date: 26-Feb-07

Analytical Environmental Services, Inc.

CLIENT: LAE Consulting
Project: Alabama
Lab Order: 0702B60

CASE NARRATIVE

The COC was not signed when it was relinquished.

A project name was not provided on the COC. Project Name "Alabama" will be used per Lisa Evans on 2/22/07.

Samples should be analyzed for Lead per Non-Responsive on 2/22/07.

Analytical Environmental Services, Inc.

Date: 26-Feb-07

ANALYTICAL QC SUMMARY REPORT

CLIENT: LAC Consulting

Work Order: 07021860

Project: Alabama

TestCode: 6010B_S

Sample ID	MB-03025	Sample Type	MBLK	TestCode	6010B_S	Units	mg/Kg	Prep Date	2/22/2007	RunNo	98742
Client ID	03025	Batch ID	03025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001051
Result		POL	SPK value	SPK Ref Val	%REC	Low Limit	HQ/Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead			5.00								
Sample ID	LCS-03025	Sample Type	LCS	TestCode	6010B_S	Units	mg/Kg	Prep Date	2/22/2007	RunNo	98742
Client ID	03025	Batch ID	03025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001049
Result		POL	SPK value	SPK Ref Val	%REC	Low Limit	HQ/Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead			5.00								
Sample ID	0702B08-002AMSD	Sample Type	MS	TestCode	6010B_S	Units	mg/Kg-dry	Prep Date	2/22/2007	RunNo	98742
Client ID	03025	Batch ID	03025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001055
Result		POL	SPK value	SPK Ref Val	%REC	Low Limit	HQ/Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead			5.40								
Sample ID	0702B08-002AMSD	Sample Type	MSD	TestCode	6010B_S	Units	mg/Kg-dry	Prep Date	2/22/2007	RunNo	98742
Client ID	03025	Batch ID	03025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001062
Result		POL	SPK value	SPK Ref Val	%REC	Low Limit	HQ/Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead			5.40								

Qualifiers: B Analyte detected in the associated Method Blank
 H Building blocks for preparation of analysis extended
 R RPD volume accepted recovery limits
 F Analyte detected below established limits
 S Spike Recovery outside accepted recovery limits
 E Value above quantitation range
 N Analyte not in LAC certified



ARAB Armory, Arab, Alabama



View of possible termite damage on landscape timbers located in the front of the Armory



View of exposed header (wood) located outside adjacent to the supply room



View of termite damage on the shelving in the supply room.



View of active termites that came from the shelving in the supply room



View of termite and moisture damage on the wood of the shelving



View of water and termite damage behind the shelving in the supply room



View of termite mud tunnels, located within the wooden shelving in the supply room



View of blistering paint in the drill hall



View of stained ceiling tiles in the hallway



View of stained ceiling tiles in the admin office



View of solvent tanks used for weapons cleaning in the converted range



View of converted range, weight equipment is located in front of the range pit



Up range view of the converted range, used as a locker room



View of pit with sand in the converted range



Down range view of the converted range



Lead wipe samples 1 & 2, located on the backstop



Lead wipe sample 3, located on the floor in front of the pit



Lead wipe sample 4, located on the leg press bench



Lead wipe sample 5, located on top of wall locker #16



Lead wipe sample 6, located on the range floor near Baker's locker



Lead wipe sample 7, located on a table in the range near the exit



Lead wipe sample 8, located on the floor outside the entrance to the range



Lead wipe sample 9, located on top of refrigerator in the kitchen storage room



Lead wipe sample 10, located under the food prep table in the kitchen



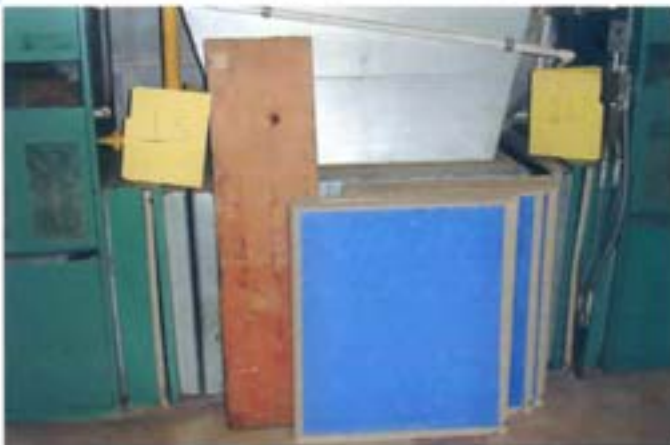
Lead wipe sample 11, located on top of the Coke machine in the Drill Hall



Lead wipe sample 12, located on the center of the Drill Hall floor



Lead wipe sample 13, located on a randomly selected table used to clean weapons in the Drill Hall



Lead wipe sample 15 & 16, located on the supply side of each air filter



Lead wipe sample 14, located on the supply air grill in the orderly room



Lead wipe sample 18, located on the return air grill in the supply NCO office

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

ARLOC 01000	INSTALLATION ARAB ARMORY	BLDG/RM NO. 1644 CULLMAN ROAD ARAB, ALABAMA
LOCATION/CODE AA	OPERATION/CODE ADO	
SURVEY DATE 15 FEB 07	EVALUATOR LAE CONSULTING	
MACOM/CODE NG	SUBMACOM/CODE XX	SUPERVISOR SFC [REDACTED]
TELEPHONE/DSN NO. 256.586.4195	UNIT/ORGANIZATION ARAB ARMORY	RAC 3 FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS
		NO. LOC(S)
		NO. OTHER 2

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

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

SECTION 4: HAZARD INVENTORY DATA

GAS CODE	HAZARD DESCRIPTION	PAC	EPC
POLIGHTIN	INADEQUATE LIGHTING	4	

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY

SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

ARLOC 01000	INSTALLATION ARAB ARMORY	BLDG/RM NO. 1644 CULLMAN ROAD ARAB, ALABAMA
LOCATION/CODE SA		OPERATION/CODE SAH
SURVEY DATE 15 FEB 07		EVALUATOR LAE CONSULTING
MACOM/CODE NG	SUBMACOM/CODE	SUPERVISOR SFC Non-Responsive
TELEPHONE/DSN NO. 256.586.4195	UNIT/ORGANIZATION ARAB ARMORY	RAC 3 FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS
		NO. LOC(S)
		NO. OTHER 2

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
LIGHTING	8.3-18.6	FC	50-100	UNACOMM

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	X/	CANAL CAPS	/	APRONS	X/	COLD WEATHER BOOTS/HATS	/
FULL FACE SHIELD	/	EARPLUGS	X/	COLD WEATHER CLOTHING	/	HARD HATS	/
CHEMICAL/SAFETY	X/	HELMETS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SAFETY/IMPACT	X/	MUFFS	X	FULL BODY SUIT	/	SAFETY/CONDUCTIVE SHOES	/
WELDING HELMET	/	MUFF/EARPLUG COMBO	/	HEAT REFLECTIVE VEST/SUIT	/	SAFETY/NCN-CONDUCTIVE SHOES	X/
		MUFF/EARPLUG W/TIME LIMIT	/	SAFETY BELT/HARNESS	/		/

SECTION 4: HAZARDOUS INVENTORY DATA

[illegible]

SECTION 5: PERSONNEL DATA

[illegible]

SECTION 6: COMMENTS

2 No comments

u See attached sheet



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

NGB-ARS-SEIH

16 January 2007

MEMORANDUM THRU COL [Redacted] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: MAJ [Redacted] Facility Supervisor, 81774 Highway 9, Ashland, AL 36251.

SUBJECT: Industrial Hygiene Special of the Ashland Armory.

1. References.

- a. Report completed 22 December 2006, Industrial Hygiene report for Ashland Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC **Non-Responsive** of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Ashland Armory.

b. **Non-Responsive** of OSHA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines for converting indoor firing ranges to other uses and NG REG 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges. (RAC 1)**

b. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

c. **Hazardous communication or HAZCOM refresher training.** Continue with annual HAZCOM Training. Dated and signed records should be maintained of all HAZCOM training administered.

d. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin.
RAC 3, AR 40-5

e. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non-functioning light fixtures.

f. 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. RAC 3 AR 40-5

g. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

h. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ. [Redacted] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [Redacted] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

OSHEA II
IH CONSULTING

Alabama Army National Guard
Ashland Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: MA [REDACTED]
Armory Supervisor, 1200 Quarter Masters Battalion and 128th Medical Company,
Ashland, Alabama 36215

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module
(HHIM) Survey of 1200 Quarter Masters Battalion and 128th Medical Company,
Alabama 36215

December 21, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

Oshes II Industrial Hygiene Consulting
IH Survey Ashland Amory

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at 1200 Quarter Masters Battalion and 128th Medical Company.

3. **Background:** 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: 1200 Quarter Masters Battalion and 128th Medical Company, is housed in the Ashland Armory. Nine full time individuals perform administrative duties. The armory was constructed in the 1970's and is approximately 10,000 square feet. It contains several offices/ten administrative areas, one combined kitchen/mess hall, supply rooms, weapons rooms/vault and an indoor firing range. The armory was well kept but there was evidence of leaking. Ceiling and floor tile was intact with no visible signs of friability.



The drill hall floor is tiled floor.



(hallway of offices in the armory)



Water circles were noted in ceiling tile of administrative areas.



(Leak right off the drill hall floor) Buckets were used to catch leaking water.



Administrative areas





In the administrative office area of the armory phone answering, computer use and paper generation is performed.





The armory has several offices





Xeroxing/copying and filing is accomplished in this admin area.





This room is used as a meetings/classroom . (below)





The kitchen is not used to prepare food. Food is contracted out.



(indoor firing range)



The range is used for storage.



It was stated that it had not been used in years. Wipe samples were obtained of the bullet stop. The results will be addressed later in the report.

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 and evaluated for the armory's inventory.

c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	75.1-----77.4	50----100
Class room	62.2-----75.1	50---100
Class room 2	59.2-----61.6	50---100
Kitchen	47.8-----52.2	50---100
Admin areas	59.7-----68.5	50---100
Firing range	30.5-----31.9	5-----10
Vault	25.1-----28.9	50---100
Supply	15.1-----18.4	50---100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

e. **Wipe sampling:** Wipe samples were obtained from the following areas: the bullet backstop of the firing range, dusty horizontal surfaces in the assembly/drill hall area and the kitchen. Twenty-six wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. Sample results were below reading limits (BRL) in the kitchen and the drill hall. Samples obtained in the firing range indicated the presence of lead on the bullet stop. These samples were taken from the top, middle and bottom, the left side, center, and right side of the stop.

Lead Sample Results of Bullet Stop

Sampling area of the bullet stop.

<i>SAMPLE NUMBER</i>	<i>SAMPLE RESULT</i>	<i>LOCATION</i>
61100	88 Micrograms	Bullet stop
61101	736 Micrograms	Bullet stop
61102	1470 Micrograms	Bullet stop
61103	1270 Micrograms	Bullet stop
61104	983 Micrograms	Bullet stop
61105	823 Micrograms	Bullet stop
61106	3290 Micrograms	Bullet stop
61107	824 Micrograms	Bullet stop
61108	177 Micrograms	Bullet stop
61109	4190 Micrograms	Bullet stop
611010	506 Micrograms	Bullet stop
611011	266 Micrograms	Bullet stop
611012	264 Micrograms	Bullet stop
611013	30 Micrograms	Bullet stop
611014	382 Micrograms	Bullet stop
611015	3650 Micrograms	Bullet stop
611016	1340 Micrograms	Bullet stop
611017	267 Micrograms	Bullet stop
611018	47 Micrograms	Bullet stop
611019	111 Micrograms	Bullet stop
611020	BRL	Horizontal surface- Kit
611021	BRL	Horizontal surface- Kit
611022	66 Micrograms	Bullet stop
611023	33 Micrograms	Bullet stop
611024	BRL	Drill Hall
611025	BRL	Drill Hall

f. **Motor Pool Area:** The motor pool area located behind the armory. Vehicles are used during drills. Armory's personnel perform no maintenance operations or vehicle repairs.

g. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

h. **Arms Room/Weapons Vault:** Weapons are stored 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.

i. **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 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office
ATTN: LTC **Non-Responsive**
1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office
ATTN: Major **Non-Responsive**
1720 Congressman Dickerson Dr.
Montgomery, AL 36106

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	1595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	3431625

Enclosure No. 1

DD2214 -Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)							
1. DATE (YYYYMMDD) 2008 / 12 / 04				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</div> <div style="font-size: small; margin-top: 5px;">1- INITIAL SURVEY 2- RESURVEY 3- OTHER</div>			
3. SOUND LEVEL METER		4. MICROPHONE		5. CALIBRATOR			
a. MANUFACTURER Extech		a. MANUFACTURER		a. MANUFACTURER Extech			
b. MODEL 407703	c. SERIAL NO. 041002810	b. MODEL	c. SERIAL NO.	b. MODEL 7703A	c. SERIAL NO. 4XX69		
d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>				7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>			
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Ashland Armory 81744 Hwy 984 West Ashland, Alabama 36251					9. PRIMARY SOURCE OF NOISE Trucks		
					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)
2.5 Ton truck	S		87.2			X	
HUMMWV	S		86.8			X	
NOTES: Rang 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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.							
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) All who work in this shop area							
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION							
a. NAME (Last, First, Middle Initial) CPS		b. TELEPHONE (include area code) 256-354-2142			c. ORGANIZATION Ashland 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

Isopropyl alcohol
Glass cleaner
Dishwashing detergent
Scouring powder
bleach

Enclosure No 3

Laboratory Analysis

Enclosure No. 4

Analytical Environmental Services, Inc.

Date: 12/21/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: OSHEA II
Project: Ashland
Delivery Orders:
PO No:

Lab Order: 0612992
Date Received: 12/18/2006 1:05 PM
Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0612992-001A	61100	88	µg. Total	20	1	12/6/2006	12/20/2006	JY
0612992-002A	61101	736	µg. Total	20	1	12/6/2006	12/20/2006	JY
0612992-003A	61102	1470	µg. Total	51	2.57	12/6/2006	12/20/2006	JY
0612992-004A	61103	1270	µg. Total	49	2.43	12/6/2006	12/20/2006	JY
0612992-005A	61104	983	µg. Total	20	1	12/6/2006	12/20/2006	JY
0612992-006A	61105	823	µg. Total	20	1	12/6/2006	12/20/2006	JY
0612992-007A	61106	3290	µg. Total	78	3.9	12/6/2006	12/20/2006	JY
0612992-008A	61107	824	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-009A	61108	177	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-010A	61109	4190	µg. Total	87	4.35	12/6/2006	12/19/2006	JY
0612992-011A	611010	506	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-012A	611011	266	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-013A	611012	264	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-014A	611013	30	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-015A	611014	382	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-016A	611015	3650	µg. Total	85	4.23	12/6/2006	12/19/2006	JY
0612992-017A	611016	1340	µg. Total	49	2.47	12/6/2006	12/19/2006	JY
0612992-018A	611017	267	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-019A	611018	47	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-020A	611019	111	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-021A	611020	BLK.	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-022A	611021	BLK.	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-023A	611022	66	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-024A	611023	33	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-025A	611024	BLK.	µg. Total	20	1	12/6/2006	12/19/2006	JY
0612992-026A	611025	BLK.	µg. Total	20	1	12/6/2006	12/19/2006	JY

Qualifiers: BLK. - Not Detected at the Reporting Limit

DF - Dilution Factor

Results are blank corrected where applicable

Page 1 of 1

Full Time Personnel

Non-Responsive

M/	
LT	
SF	
SF	
SF	
SF	
SS	
SG	
SP	
SS	
SC	

Enclosure No. 5

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HHIM

Enclosure No. 6

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC_01000

INSTALLATION_AARNG

BLDG _____

ROOM _____

[illegible]

PPE	REQUIRED	UTILIZED		
<u>GLOVES</u>	R U	<u>RESPIRATOR</u>	R U	<u>EYES/FACE</u>
ACID	<u> </u>	AIRLINE	<u> </u>	CHEM/SPLASH
COLD SURFACE	<u> </u>	ABRASIVE BLASTING HOOD	<u> </u>	FULL FACE SHIELD
HOT SURFACE	<u> </u>	DISPOSABLE	<u> </u>	CHEM/SAF IMPACT
<u>X / X</u>				
NBC AGENTS	<u> </u>	FULL FACE AIR PURIFYING	<u> </u>	SAFETY IMPACT
OIL	<u> </u>	½ FACE AIR PURIFYING	<u> </u>	WELDING HELMET
SOLVENTS	<u> </u>	POWERED AIR PURIFYING	<u> </u>	WELDING GOGGLES
SURGICAL GLOVES	<u> </u>	¼ FACE AIR PURIFYING	<u> </u>	LASER EYE PROTECT
OTHER	<u> </u>	SCBA	<u> </u>	OTHER

EARS/ HEARING	R	U	BODY	R	U	HEAD AND FEET	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
P0NOISECO	P0noiseco	2	0	Noise, continuous
P0FOOTHAZ	P0stress	3	0	Mental / physical stress
P0FLYPROJ	P0lifting	3	0	Heavy lifting
P0EYEHHAZ	P0eyehaz	2	A	Eye Hazards
P0FLAMMHAZ				
P0LIFTING				
P0SHARP OBJE				
P0ELSHOCK				
P0LUBEOIL				

SUGGESTED	DESCRIPTED OPERATION

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

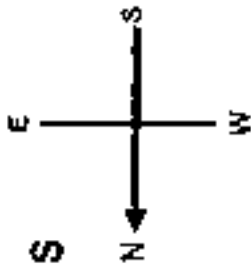
PERSONNEL LIST ATTACHED

Facility layout

Enclosure No. 7

ATTACHMENT -- A
OFFICIAL

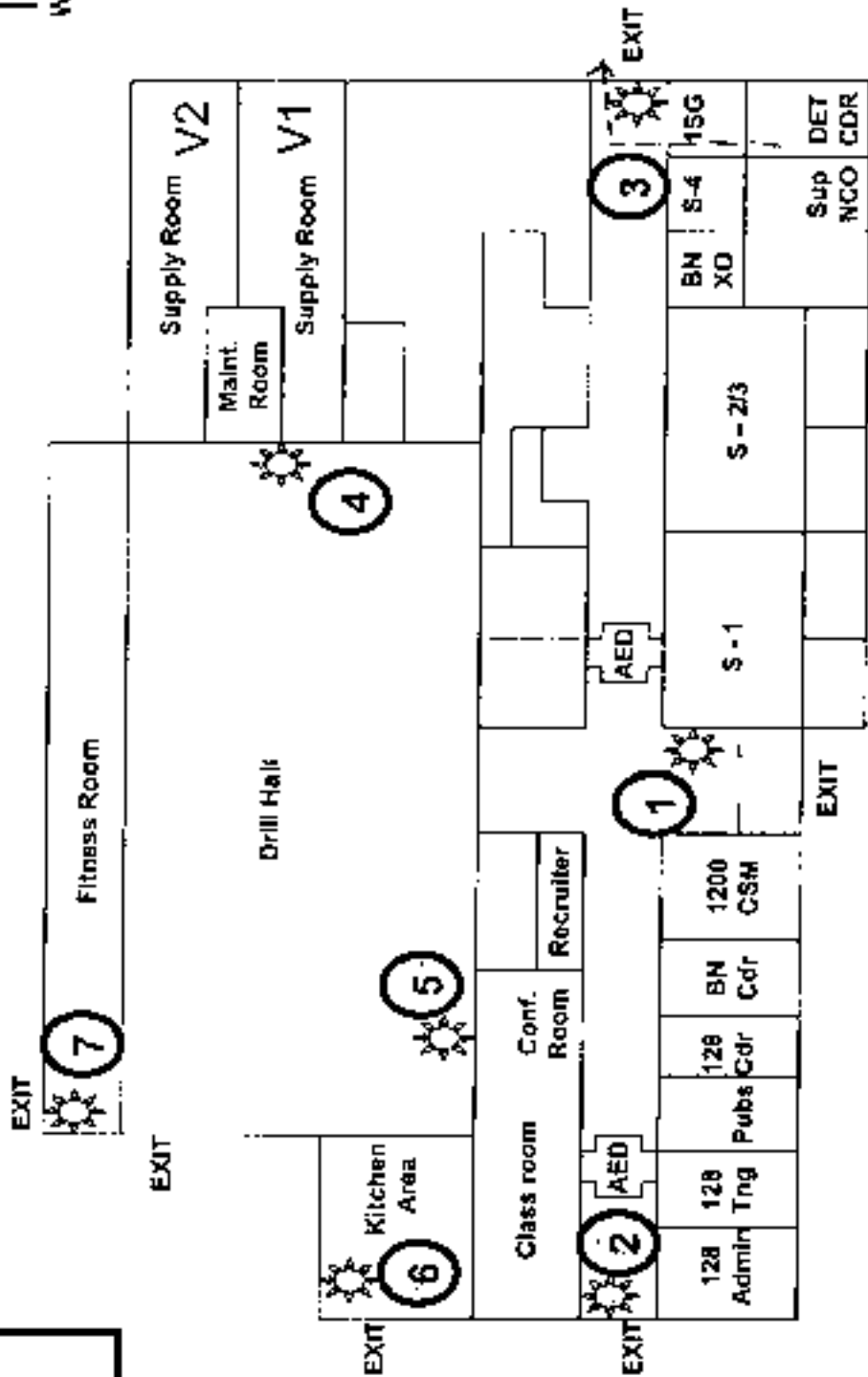
FIRE STATIONS FIRE AND EVACUATION STANDING OPERATING PROCEDURES



LEGEND

= Extinguisher

= Fire Post



DIAL 911

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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, Company A 1st Battalion
20th Special Forces, ATTN: SPO [REDACTED] 1455 Jordan Parkway, Auburn, Alabama,
36830.

SUBJECT: Industrial Hygiene Survey of the Ft. Charles A. Rollo National Guard
Armory, Auburn, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

- a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.
- b. Mrs. [REDACTED] of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

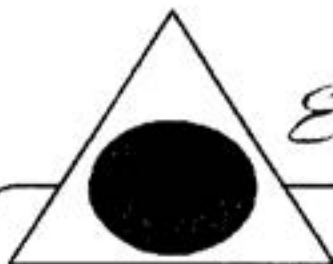
- a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Use the report to help in correcting all deficiencies noted by the contractor.
- c. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the contract visit, especially if this will help eliminate health hazards and reduce medical surveillance cost.
- d. 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.

5. If additional information is needed about the contractors report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ **Non-Responsive** Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: Company A 1st Battalion 20th Special Forces. Attn: Commander, Ft. Charles A. Rollo National Guard Armory, 1455 Shug Jordan Parkway, Auburn, Alabama 36830.

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Al.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Charles A. Rollo National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Charles A. Rollo Armory. An interview was conducted with SPC [REDACTED] to gather background and historical information relative to the various operations at the Ft. Charles A. Rollo Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses. Appendix E includes laboratory results and Appendix F includes a list of all personnel working in the Armory.

3. Background. At the request of Mr. [REDACTED] Non-Responsive of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Charles A. Rollo National Guard Armory in Auburn, Alabama on June 10, 2004 by [REDACTED] Industrial Hygienist.

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Alabama.

4. Facility Description. This facility houses Company A 1st Battalion 20th Special Forces. Five full time employees work in the Ft. Charles A. Rollo Armory. The armory is utilized by supply, administrative and training personnel during the week (Monday through Friday) and is utilized for Guard drill on the weekends. The physical structure is a one story red brick building. The building was constructed in the early 1990's. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Admin Offices	Men's Latrine
Supply Room/Vault	Women's Latrine
Communication room	Inactive firing range
Kitchen	Drill hall
Locker & weight room	NBC room
Flammable storage	

5. Health Hazard Inventory Module (HHIM) & Risk Assessment Codes - The results of the walk through survey were entered into a health hazard inventory module (HHIM) industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 6055.1 and are reproduced in Appendix C.
6. Findings.
- A. Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room - An initial walk through of the facility revealed that there was not an inactive firing range located on the premises however, an active firing range was located at the facility. A vehicle maintenance operation was not present and an inactive boiler room was not present.
- B. Suspect Asbestos Containing Materials
(1) There were no suspect asbestos containing materials identified in this facility. This is consistent with relatively new construction of the building.

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Alabama.

- C. Supply Room – The employee in charge of this operation is SPC [redacted] Non-Responsive. SPC [redacted] works in this area during the week. The employee is responsible for ordering, distributing and storing military supplies and equipment. An ULLS and a RCAS computer system are also utilized in this operation. SPC [redacted] uses the computer approximately five hours per day. The employee had no ergonomic concerns or complaints. A flammable cabinet was not present in the supply area. Equipment containing a radioactive source was stored in a cabinet in this operation under lock and key. The appropriate signage warning of the hazard was present.
- D. Vault – The vault is used to store military weapons. Entry into the vault is limited to SPC Thomas on weekdays and on drill weekends. Weapons repair is not performed inside the vault nor is it meant for continuous occupancy. There is only one means of entry and egress and no independent ventilation is present in the vault.
- E. Illumination survey - An illumination survey was conducted in six areas at this facility. The illumination levels in five areas surveyed were below the American National Standards Institute (ANSI) recommended minimum illumination levels.

The illumination levels in the survey can be seen in table II.

TABLE II
Illumination Survey

Location	Illumination Level (ftc)	ANSI Minimum Requirements (ftc)	DG 412-2 Minimum Requirements (ftc)
SSG [redacted] office	20	50 – 100	50
SSG [redacted] office	23	50 – 100	50
Supply room storage	10-20	10	50-100
Supply room office	45	10	10
Orderly room SPC [redacted]	32	50-100	50-100
SFC [redacted] Non-Responsive	31	50-100	50-100

Notes: ANSI office illumination depending on the task is 50 ftc for general desk work and 90 ftc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel. The floor was composed of concrete and the ceiling is composed of 2x8 drop in ceiling tile which is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor and weapons are also cleaned in the area. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq.ft. guideline as required by NG PAM (AR) 385-18.
- G. Kitchen – The kitchen is adjacent to the drill floor and is fully functional. The kitchen is not used during the drill weekend. A caterer is utilized when needed.
- H. Active Firing Range – The Ft. Rollo Armory is equipped with an active indoor firing range therefore no further sampling was done in this operation.
- I. Flammable Storage Operation – Paint, paint thinner, oils, lubricants, etc. are stored in this operation. This operation is accessed by the supply sergeant on weekdays and drill weekends. Material safety data sheets (MSDS) and a hazardous materials inventory list (HMIL) were readily available. Personal protective equipment (PPE) was available and a fire extinguisher was also available. A spill kit was not observed for this operation.

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Alabama.

Recommendations

1. Lighting should be upgraded in all areas where indicated as deficient.
2. A spill kit should be provided for the flammable storage operation.

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Alabama.

Ft. Rollo National Guard Armory
Lead Wipe Sample Analysis
Appendix E

Sample No.	Location	Type Analysis	Micrograms /cubic ft. ug/m3
A-01	Drill Fl., Near overhead door	Lead	BRL
A-02	Drill Fl. Center of Floor	Lead	27.0
A-03	Drill Fl., near wall near coke machine.	Lead	BRL
A-04	Kitchen, at entrance	Lead	BRL
A-05	Blank	Lead	BRL
A-06	Supply grill, orderly room	Lead	BRL

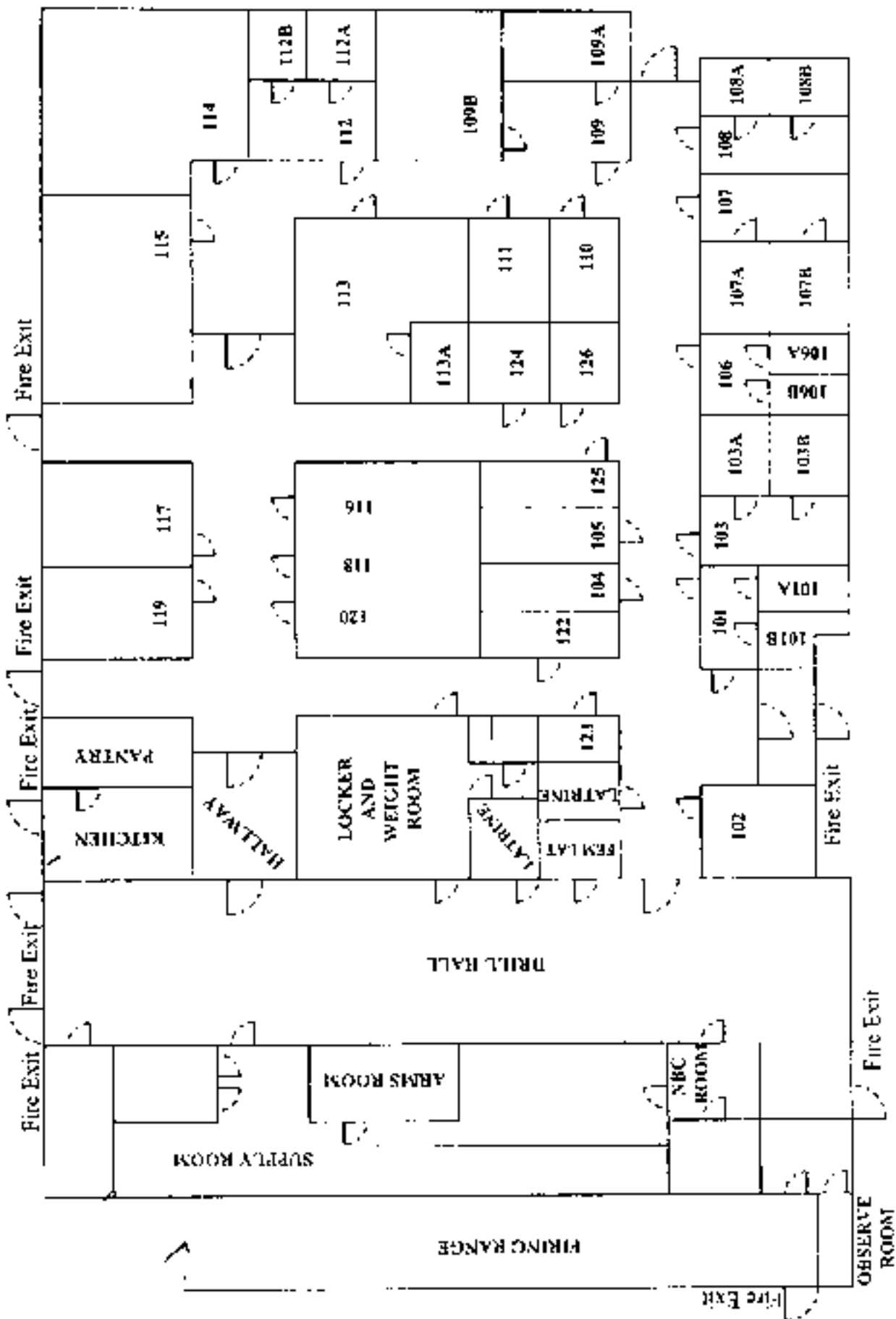
* BRL - below the reporting level

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APPENDIX A

Fire Escape Plan Building NOT To Scale

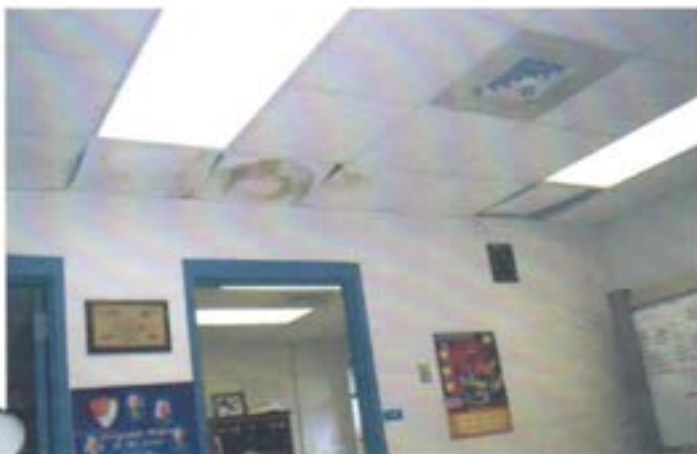
● You Are Here



APPENDIX B







APPENDIX C

Investigation
010200
Location
AA
Operation
AD
Survey Date
040670
Year Month Day
040670
MACOM
WG
Sub-MACOM
XX
RAC
4
Unit/Organization
L455 SHUG PKWY
AUBURN AL 36830
ADMIN
Program Number
ADMIN

Supervisor
Mr
334
007
R973
Supervisor of Point of Contact Telephone Number
334
007
R973
Lab Hoods
Vapor Degreasers
Spray Booths
Open Surface Tanks
Commercial
Frequency (hrs/day)
No. CIVs
No. MIL
Contractors
No. LOCs

Controls present (if >6, continue in comments)
Lighting
Evaluation [25 char max per line]
Unit Code
Controls Required [25 char max per line]

Manufacturer's Description [10 char max]
NIOSH TC# or foreign equiv. [10 char max]

Head and Feet
Cold weather boots
Hard hats
Impervious boots
Safety shoes (conductive)
Safety shoes (nonconductive)
Other
Other
Other
Other

Body
Aprons
Cold weather clothing
Coveralls
Full body suit
Heat reflective vest/suit
Safety harness
Special purpose clothing
Other
Other

Hearing
Canal caps
(>85-100dB steady) earplugs
Helmets with muffs
Muffs alone
(100-110) multiearplug comb
Muffs and earplugs
(110 or >) with time limit
Other
Other

Respirator
Alkaline
Strategic blasting hood
Disposable
Full face air purifying
1/2 face air purifying
Powered air purifying
1/4 face air purifying
Self-contained
Other

Gloves
Cold surfaces
Hot surfaces
NBC agents
Oil
Solvents
Surpical gloves
Leather/cotton
Other

Head and Face
Chemical splash
Full face shield
Chemically impact
Safety impact
Welding helmet
Sunglasses
Welding goggles
Laser eye protection
Other

Reminders: ergonomics - dermalis - physical agents - flammable storage
EYE (permanent) - EYE (portable) - SHW - GMV - LEV

evaluator's recommendation
or agreement

MedDAC (P) M402 1 MAY 85

FORM 609-R

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Hazard Description

Item	Quantity	Unit	Price	Total
1. 1000	1000	1000	1000	1000
2. 1000	1000	1000	1000	1000
3. 1000	1000	1000	1000	1000
4. 1000	1000	1000	1000	1000
5. 1000	1000	1000	1000	1000
6. 1000	1000	1000	1000	1000
7. 1000	1000	1000	1000	1000
8. 1000	1000	1000	1000	1000
9. 1000	1000	1000	1000	1000
10. 1000	1000	1000	1000	1000
11. 1000	1000	1000	1000	1000
12. 1000	1000	1000	1000	1000
13. 1000	1000	1000	1000	1000
14. 1000	1000	1000	1000	1000
15. 1000	1000	1000	1000	1000
16. 1000	1000	1000	1000	1000
17. 1000	1000	1000	1000	1000
18. 1000	1000	1000	1000	1000
19. 1000	1000	1000	1000	1000
20. 1000	1000	1000	1000	1000
21. 1000	1000	1000	1000	1000
22. 1000	1000	1000	1000	1000
23. 1000	1000	1000	1000	1000
24. 1000	1000	1000	1000	1000
25. 1000	1000	1000	1000	1000
26. 1000	1000	1000	1000	1000
27. 1000	1000	1000	1000	1000
28. 1000	1000	1000	1000	1000
29. 1000	1000	1000	1000	1000
30. 1000	1000	1000	1000	1000
31. 1000	1000	1000	1000	1000
32. 1000	1000	1000	1000	1000
33. 1000	1000	1000	1000	1000
34. 1000	1000	1000	1000	1000
35. 1000	1000	1000	1000	1000
36. 1000	1000	1000	1000	1000
37. 1000	1000	1000	1000	1000
38. 1000	1000	1000	1000	1000
39. 1000	1000	1000	1000	1000
40. 1000	1000	1000	1000	1000
41. 1000	1000	1000	1000	1000
42. 1000	1000	1000	1000	1000
43. 1000	1000	1000	1000	1000
44. 1000	1000	1000	1000	1000
45. 1000	1000	1000	1000	1000
46. 1000	1000	1000	1000	1000
47. 1000	1000	1000	1000	1000
48. 1000	1000	1000	1000	1000
49. 1000	1000	1000	1000	1000
50. 1000	1000	1000	1000	1000
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First Name

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Personnel data provided by the facility is attached to this form

Non-Response

MI Sex Category

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FOIA Requested Record #J-15-0085 (AL)
Released by National Guard Bureau
Page 104 of 759

Remember to comment on problems, recommendations, and needed control items

2. Other operations: OFF, MAIN

07620
 Location WF
 Survey Date 040616
 Year Month Day
 Survey Date 040616
 Year Month Day
 WRP
 Mr. Ms.
 Supervisor 334
 Supervisor or Point of Contact Telephone Number 89773
 Lab Hoods Vapor Degreasers Spray Booths
 Controls present (if >6, continue in comments)(25)
 Evaluation [25 char max per line]
 Unit Code
 Controls Required [25 char max per line]
 Unit Code
 Frequency (hrs/day)
 No. CIVs
 No MIL
 Contractors
 No LOCs
 Building Number ETCA 110
 Sub-MACOM X X
 MACOM WG
 Unit/Organization 1455 SHUG PKWY
 455 SHUG PKWY
 36830
 36830
 Room Number
 Active Firing Range

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Gloves
 acid
 cold surfaces
 hot surfaces
 NBC agents
 oil
 solvents
 surgical gloves
 leather/cotton
 other
 Respirator
 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
 Body
 aprons
 cold weather clothing
 coveralls
 full body suit
 heat reflective vest/suit
 safety belt/harness
 special purpose clothing
 other
 Head and Feet
 cold weather boots/shoes
 hand hails
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other
 other

Eyes and Face
 chemical splash
 full face shield
 chemical safety impact
 safety impact
 welding helmet
 sunglasses
 welding goggles/glasses
 laser eye protection
 other
 Hearing
 canal caps
 (>85-100dBA steady) earplugs
 helmets with muffs
 muffs alone
 (108-118) multifearplug comb
 muffs and earplugs
 (118 or >) with line limit
 other
 other
 Head and Feet
 cold weather boots/shoes
 hand hails
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other
 other

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

Reminders: ergonomics - dermalitis - physical agents - flammable storage
 EYE (permanent) - EYE (portable) - SHW - GMV - LEV

evaluator's recommendation
 or agreement

MEDDAC FORM 609-R
 (IF FARE-02)
 1 MAY 95

Requested Record #J-1-0085
 Released by National Guard Bureau

APR 00 070200 Installation 040640 Year Month Day Survey Date 040640 Year Month Day MACOM WG Sub-MACOM RAC 334 0077 8973 Supervisor or Point of Contact Telephone Number DSN Commercial 334 0077 8973 Vapor Degreasers Spray Booths Open Surface Tanks Evaluation [25 char max per line] Controls present (if >6, continue in comments) [25] Lights- Supply room Storage Supply Room office Unit Code 10-20 450 FIC FIC Controls Required [25 char max per line] 50-100 50-100 NIOSH TC# or foreign equiv. [10 char max] Gloves Head and Feet Body Hearing Faces and Face

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PAC ENC

CAS Code

PAC ÉPC

Hazard Description

[illegible]Social Security Number or
Other Unique Identifier

Lael Manna

First Name

III

Sex

Category

[illegible]

A large grid of 10 columns and 20 rows, with a black rectangular redaction box covering the top right corner.

Comments

Remember to comment on problems, recommendations, and needed control items

2. Operation described is: SAH

2. Other operations: MAN , LOA

¹ For a detailed procedure by the Landlord to file to this form

background to comment on prebials. The Commission's and several other firms

1. Functions performed is: DHP: Storage and dispersing oil and lubricants
2. Other operations: SAH, MAN, LOA.

MEDDAC (PFT MEALDE) **FORM 609-R**
1 MAY 85

1. NAME
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Special Security Number or Other Identification Number

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First Name

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Personnel data provided by this facility is attached to this form

Comments

As an Officer to complete on proficiency, accuracy, and needed control items

1. Operation designated is: ADP

2. Other: LOA, MAI

3. Kitchen is fully functional but is not used for drill. A caterer is used when needed

AFHQ

Installation

Location

07 07H

Survey Date

04 06 10

Building Number

ETICAR 10110

Room Number

DRI LL Floor

Sub-MACOM

X X

Unit/Organization

1455 SHUG PK WY
AUBURN AL 36830

Supervisor

X

Mr.

Ms

SPC

Supervisor or Point of Contact Telephone Number

334 007 8973

Commercial

X

Frequency (hrs/day)

1 1

No. CIVs

1

No. MIL

1

Contractors

1

No. LOCs

1

Ventilation Units

X

Open Surface Tanks

X

Controls present (if >6, continue in comments)(25)

Evaluation (25 char max per line)

Unit Code

Controls Required (25 char max per line)

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Gloves

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Respirator

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Body

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Head and Feet

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parameters to determine on profitability, recommendations, and needed control strategy.

Operation described as: **OTF**

2. Other Operations: LOA, MAN

3. Vehicles are driven onto the floor and weapons are also cleaned on the floor.
4. Lead wire samples were taken on the drill floor and the results revealed the following: That all the wire samples were between 200 microns.

FOIA Requested Record #J-15-0085 (AL)
Released by National Guard Bureau
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APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2300
31 January 1994

NG PAM (AR) 385-15
ANGPAM 91-101

Safety

GUIDELINES FOR CONVERTING INDOOR FIRING RANGES TO OTHER USES

Summary. This is a new pamphlet. This guidance prescribes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. This guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulatory guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVM-5).

Impact on New Manning System. This guidance does not contain information that affects the New Manning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau, Attn: NGB-AVM-5, 111 South George Mason Drive, Arlington, VA 22204-1332.

Distribution. Distribution of this publication is made in accordance with its requirements on DA Form 12-09-E.

CONTENTS (Listed by paragraph numbers)

	Para
Purpose	1
References	2
Explanation of abbreviations and terms	3
Policy and procedures	4
Goal	5
Background	6
Wipe Sample Media	7
Wipe Sampling Protocol	8
Range Cleaning Instructions	9
Cleaning Stored Contaminated Equipment	10
Contaminated Sand and Lead Waste	11
Medical Surveillance	12
Worker Education	13
Personal Protective Equipment	14
Point of Contact	15

Appendices

- A. Sampling Strategy for Collection of Wipe Samples
- B. Interpretation of Sample Results (Prior to Cleaning)
- C. Interpretation of Sample Results (After Cleaning)
- D. OSHA Instruction CPL 2-2.20B
- E. Where to Purchase Sample Media and Containers
- F. AETH Form 8-R (Bulk Sample Data)
- G. Instructions to Complete AETH Form 8-R
- H. Examples of Computation of Lead Level from Wipe Sample Results
- I. Supporting Laboratories and Areas Served

Glossary

1. Purpose
This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.
2. References
Related publications are listed below.
 - a. DODI 6035.1 (Department of Defense Occupational Safety and Health (OSH) Program).
 - b. AR 17-34 (The Army Respiratory Protection Program).
 - c. AR 40-3 (Preventive Medicine).
 - d. NGR (AR) 385-15 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).
 - e. TB MED 503 (Occupational and Environmental Health Respiratory Protection Program).
 - f. USAEHA TG 143 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).
 - g. Title 26, Code of Federal Regulations (CFR) revision, Part 1910 (Occupational Safety and Health Standards).

31 January 1994

HG Pam (AR) 385-16ANGPAM 91-101

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

B-1 200 micrograms/m³ ft or LESS

If all sample results are 200 micrograms/m³ ft or less, the range can be converted and/or used for any purpose.

B-2 BETWEEN 201 and 200,000 micrograms/m³ ft

Range must be decontaminated. Continue with cleaning instructions noted in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

B-3 OVER 200,000 micrograms/m³ ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/m³ ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/m³ ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/m³ ft limit.

B-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substratum. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE, that if your original 4-6 sample results were, i.e., 175,000 ug/m³ ft then you would have to reduce the lead level below 13,125 ug/m³ ft. This would meet the 75 percent reduction criteria, however, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will expose the latex paint to adhered to the substratum. If the paint peels, falls to the floor and is crushed over a period of time, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the converted range for signs of peeling paint. Paint chips can be analyzed for lead content. **DO NOT IGNORE PEELING PAINT IN A CONVERTED INDOOR FIRING RANGE.**

APPENDIX C INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

C-1 200 micrograms/m³ ft or LESS

If all sample results are less than 200 micrograms/m³ ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substratum.

C-2 ABOVE 200 micrograms/m³ ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/m³ ft level. If all sample results meet this criteria, a contrasting coat of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of kitchen equipment and food is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

APPENDIX E

Analytical Environmental Services, Inc.

Date: 7-21-2004

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region-South EM
 Project: Lead Analysis
 Delivery Order:
 PO No:

Lab Order: 040741
 Date Received: 7-12-2004 10:25
 Matrix: Wipe

Laboratory ID	Client Sample ID	Result	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
040741-001A	Asbestos A-01	BRZ	µg/ft²	30.0	1	6-30-2004	7-14-2004	EM
040741-002A	Asbestos A-02	BRZ	µg/ft²	30.0	1	6-30-2004	7-14-2004	EM
040741-003A	Asbestos A-03	BRZ	µg/ft²	30.0	1	6-30-2004	7-14-2004	EM
040741-004A	Asbestos A-04	BRZ	µg/ft²	30.0	1	6-30-2004	7-14-2004	EM
040741-005A	Asbestos A-05	BRZ	µg/ft²	30.0	1	6-30-2004	7-14-2004	EM
040741-006A	Asbestos A-06	BRZ	µg/ft²	30.0	1	6-30-2004	7-14-2004	EM

Qualifiers

NR = Not Reported at the Reporting Level

DL = Detection Limit

APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Charles A. Rollo National Guard Armory, Auburn, Alabama.

Ft. Charles A. Rollo
Employee List

1. SPO Non-Responsive
2. SSC
3. SSC
4. SFC
5. SPO

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

NGB-AVN-SI

August 9, 2005

MEMORANDUM FOR the South Carolina Army National Guard, ATTN: SFC [REDACTED]
[REDACTED] Armory Supervisor, 2505 N. Main Street, Bamberg, SC 29003.

SUBJECT: Industrial Hygiene Survey of the Bamberg National Guard Armory,
Bamberg, South Carolina.

1. References.

- a. Report submitted 28 July 2005, Industrial Hygiene Survey, Armor Inspection Services, [REDACTED] Non-Responsive
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, the Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, the Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

- a. At the request of the South Carolina State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a Service Contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at the South Carolina National Guard Armories.
- b. Mr. [REDACTED] Non-Responsive conducted the survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Follow all recommendations made in reference 1. a., attachment 1 requesting industrial hygiene (IH) services where needed to complete the recommendations.


b. Discuss the high lead samples taken inside of the inactive indoor firing range and the motor pool with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses and NG PAM 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges.

c. Use the report to help in correcting all deficiencies noted by the contractor.

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


e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

f. Ensure that the FMO and the Environmental Offices receive a copy of this report.

5. If additional information is needed about the contractors report, please contact 
Non-Responsive Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR
 COMMERCIAL (404) 559-4174/

Non-Responsive

Regional Industrial Hygienist

CF: Safety and Occupational Health Office, ATTN: LTC  1 National
 Guard Road, Columbia, SC 29201-4766

ARMORTM

INSPECTION SERVICES
INDOOR AIR QUALITY

SFC **Non-Responsive** SC National Guard, 2505 N. Main Street,

Bamberg, SC 2003

Thru

Mr. **Non-Responsive** Region South Industrial Hygiene Office, 510 Plaza
Drive, Suite 1530, College Park, GA 30349

RE

Baseline Industrial Hygiene Survey

Prepared By

Non-Responsive

July 28, 2005



July 28, 2005

1.0 INTRODUCTION

At the request of Mr. **Non-Responsive** of the National Guard Bureau Region South Industrial Hygiene Office **Non-Responsive** Certified Industrial Hygienist (CIH), of Armor Environmental Services, Inc (Armor) conducted a Baseline Industrial Hygiene Survey and walkthrough evaluation at the South Carolina ARNG armory located at 2505 N. Main Street, Bamberg, SC 29003 on June 30th, 2005. The purpose of the survey was to evaluate health hazards and controls present in the workplace, collect asbestos bulk samples and or wipe samples to determine lead and or asbestos exposures, perform illumination, ventilation, and noise surveys, and make recommendations regarding health hazards associated with work at the Bamberg SC Armory (the armory).

The facility was visually examined and site personnel interviewed regarding work activities, and types of materials/chemicals used during typical/atypical workdays, or stored on site.

2.0 FACILITY DESCRIPTION

The armory (Appendix 1, photo # 1) was constructed in 1947. The flooring throughout is a combination of exposed slab concrete, carpeting on slab concrete, carpeting on vinyl floor tiles, and 12 inch squared (12 in²) vinyl floor tiles on slab concrete. The ceilings in the classrooms and offices are 2 feet X 4 feet suspended ceiling tiles, some of which had mold growth and discolorations (Appendix 1, photo # 2).

A schematic of the facility's layout is enclosed as Appendix 2

Out buildings on site are; a - fuel rack, chemical shed (Appendix 1, photos # 3), kitchen (Appendix 1, photo # 4), storage shed (Appendix 1, photo # 5), oil storage shed (Appendix 1, photo # 6), chemical shed (Appendix 1, photo # 7), water treatment house (Appendix 1, photo # 8), and a maintenance shop (Appendix 1, photo # 9).

Fuel is stored on site in a 5,000 gallon diesel fuel storage tank that sits on a POD (Appendix 1, photo # 10). The POD contains spilled fuel for reclamation by the appropriate SC state authority.

The main building houses a- kitchen (Appendix 1, photo # 11), training room (Appendix 1, photo # 12), Classroom, offices, NBC room, supply room and a retired indoor firing range (rifr) that has been converted into a classroom.

Records regarding deactivation of the rifr were not available for review.

The armory has 67 personnel on its roster, and 3 fulltime ANG staff personnel whose duties are administrative, minor vehicle repairs such as tire changes, oil changes, replacement of broken auto parts and maintenance of the facility.

Brake pads removal and or replacement are not done on site. All major vehicular repairs are done offsite in Barnesville-, or Columbia SC. Consequently there are no major noise sources on site. At the time of the survey five ANG personnel were on site performing administrative and inventorying duties.

SGT. [REDACTED] and LT. [REDACTED] are the designated Site Safety Representatives. Both individuals were scheduled to attend formal safety training in Leesburg SC in July, 2005. Monthly safety meetings are led by SGT. [REDACTED] or LT. [REDACTED] and attendance is not recorded. Respirators, hearing protectors, and gloves are used as needed, however the site does not have a respiratory protection program, or a hearing conservation program in effect.

The site does not have a hearing conservation program, hazardous materials communications program, or a respiratory protection program, and personnel do not use personnel protective equipments (PPEs) since site activities are primarily administrative.

3.0 INSTRUMENTATION

The following instrumentation and/or sampling media were provided by the contractor and were used to obtain lead wipe dust samples, asbestos bulk samples, paint chip samples, and illumination measurements.

- EXTECH Foot Candle/ Lux Meter, Serial # K61660, calibrated 6/24/05 (Appendix 3).
- "Ghost Wipe" lead dust wipes; Expiration date: None
- One foot square (1ft²) plastic template.
- Alcohol Swabs (to decontaminate template between each sampling event)

Instrumentation and sampling media were used/operated in accordance with manufacturers' recommendations.

4.0 FINDINGS

4.1 Main Building

4.1.1 Retired Indoor Firing Range

The retired indoor firing range (rifr) has been converted into offices (Appendix 1, photo # 13), and storage spaces (Appendix 1, photo # 14). The bullet backstop is located in an enclosed area that is accessed through a door. The door was closed at the time of the survey (appendix 1, photo # 15). The

enclosed bullet backstop area was used for storage (Appendix 1, photos # 16, & 17).

Six wipe samples of settled dust were collected from surfaces inside the rifle and submitted to Analytical Environmental services, Inc (AES) for quantitative analysis for lead. Two of the six samples contained lead in concentrations that exceeded the clearance lead level of $200\mu\text{g}/\text{ft}^2$, and three samples exceeded NG PAM 385-16 acceptable surface lead clearance level of $40\mu\text{g}/\text{ft}^2$ for rifles. Table 1 below summarizes the laboratory analytical results and sample locations. See Appendix 1 for referenced photographs, and Appendix 4 for laboratory report and Chain-of-Custody form.

Table 1

Sample No.	Sample Location	Photo	($\mu\text{g}/\text{ft}^2$)
Bmb-Pb-02	Settled dust on book shelf in rifle	13	136
Bmb-Pb-03	Floor in front of vault in storage area in rifle	18	230
Bmb-Pb-04	Surface-box in vicinity of bullet backstop in rifle	17	35
Bmb-Pb-05	Floor-entrance into rifle bullet backstop enclosure	19	1710
Bmb-Pb-06	Settled office furniture in rifle	20	BRL
Bmb-Pb-07	Entrance into/exit from storage area in rifle	21, & 22	55

4.1.2 Latrine

The suspended ceiling tiles in the latrine are damaged and exhibit signs of mold growth and water and/or moisture intrusion (Appendix 1, photo # 23). The damaged and/or discolored suspended ceiling tiles should be replaced after the source of moisture/water intrusion has been identified and repaired.

4.1.3 Kitchen

The light fixture in the kitchen has blown bulbs that should be replaced. Sample Bmb-ASB-02 of the red speckled 9 inches X 9 inches (9 in^2) vinyl floor tiles and mastic (Appendix 1, photo # 24) in the kitchen (Appendix 1, photo # 25) was collected and submitted to AES for Polarized light Microscopic (PLM) analysis for asbestos. The laboratory results (Appendix 4) are that the floor tiles contain 10% Chrysotile asbestos and are Asbestos Containing Materials (ACMs) by definition.

4.1.4 Training Room

The suspended ceiling tiles are damaged and exhibit signs of mold growth which is indicative of water leak and/or moisture intrusion (Appendix 1, photo # 26). The damaged and/or discolored suspended ceiling tiles should be replaced.

The 9 in² red speckled vinyl floor tiles and mastic (Appendix 1, photo # 27) are ACMs because they are similar to those found in the kitchen, and are homogeneous materials by definition.

4.1.5 Classroom

Two wall mounted A/C units are the only source of fresh air supply into this room and several light bulbs are blown and need replacing.

4.1.6 NBC Room

Entry into the NBC room was restricted.

4.1.7 Supply Room

The suspended ceiling tiles are damaged and exhibit signs of mold growth and water leak and/or moisture intrusion. The damaged and discolored suspended ceiling tiles should be replaced after the moisture intrusion source(s) have been identified and repaired.

4.2 Out Buildings

4.2.1 Chemical Shed

Chemicals for potable water treatment (Appendix 1, photos # 28, & 29) are stored in the chemical shed. PPEs, MSDS and HazCom materials and safety devices such as emergency showers and/or eye wash fountains were not observed inside this building.

4.2.2 Storage Shed

Miscellaneous and non-hazardous materials are stored in steel cages in this building (Appendix 1, photo # 30). PPEs, MSDS and HazCom materials and safety devices such as emergency showers and/or eye wash fountains were not observed inside this building.

4.2.3 Oil Storage Shed

Lubricating oils and engine oils (Appendix 1, photo # 31, 32, & 33) are stored in this building. PPEs, MSDS and HazCom materials and safety devices such as emergency showers and/or eye wash fountains were not observed inside this building.

Sample Bmb-Asb-01 of the green speckled 9 in² floor tile and mastic in the oil storage shed (Appendix 1, photo # 36) was collected and submitted to AES for PLM analysis for asbestos. The laboratory results (Appendix 4) are that the vinyl

floor tiles contain 10% Chrysotile and are ACMs by definition. The mastic is non asbestos containing but must be handled as ACM because it is adhered to the ACM.

4.2.4 Kitchen and Mess Hall

The mess hall (Appendix 1, photo # 34) adjoins the kitchen. Both of these locations appeared clean and well kept at the time of the survey. The kitchen is used on weekends only.

Sample Bmb-pb-01 of the flaking wall paint in the kitchen (Appendix 1, photo # 35) was collected and submitted to AES for quantitative analysis for lead. The laboratory reported that the paint is not lead-based paint by definition, but the paint chip contained 0.00992 weight %, (Appendix 4) or 99.2 parts per million lead.

Bmb-ASB-03 of the red speckled 9 in² vinyl floor tiles and mastic was collected and submitted to AES for PLM analysis for asbestos. The laboratory results (Appendix 4) are that the floor tile contains 10% Chrysotile and is ACM by definition. The mastic throughout is non asbestos containing. The lab results confirm that 9 in² red speckled vinyl floor tiles throughout the armory are ACMs.

5.0 Illumination

Illumination levels were measured in the training room, SFC [REDACTED] office, classroom #s 1 and 2, the kitchen, the drill hall, the storage room, the mechanical storage room, the locker room, the men's latrine, and the retired indoor firing range. Table 2 below summarizes measured illumination levels and the status of each location with regards to satisfying IES guidelines. Consideration should be given to provide supplemental lighting in those areas that were below the recommended standard and to replace burnt-out bulbs.

Table 2

Location	Foot Candles	IES Recommended values
offices	37.6-27.3 (Avg. 32.45)	50-75
Common office hallway	3.7-1.3 (Avg. 2.5)	50-75
Classroom # 1, & 2	104.9 (Avg. 104.9)	50-75
Library	27.7 (Avg. 27)	50-75
Drill hall	64.9-67.4 (Avg. 66)	10-15
Break room	28 (Avg. 28)	10-15
Room north of break room	40.4 (Avg. 40.4)	50-75
Men's latrine	17.2-29.3 (Avg. 23.25)	10-15
Ladies restroom	27.8 (Avg. 27.8)	10-15
Training room	(Avg. 29.4)	50-75

6.0 CONCLUSIONS AND RECOMMENDATIONS

Conclusions and recommendations to address health and safety concerns observed or noted during this initial baseline inspection and survey are included in this report as Attachment 1.

At his time the combined effects of the Bamberg SC ANG facility's on-site inventories, site population and site activities are such that the absence of PPEs, is not critical. However a change in any of these variables will necessitate consideration of the health and safety implications of those changes.

High concentrations of lead in settled dust was confirmed on surfaces (bookshelf, floor areas at the entrance to the bullet stop, the vault, and the entrance to/exit from the closed-off bullet stop area) in the rifr.

Personnel should be discouraged from entering the rifr without wearing proper PPEs.

The area should be posted as a "Lead Hazard Area" and entry restricted pending remediation, and compliance with ANG's and HUD's clearance testing requirements.

7.0. 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.

8.0 References

- Lighting Handbook*, Illuminating Engineering Society of North America, 8th Ed 1993.
- Industrial Lighting*, ANSI/IES RP7, 1991
- USACHPPM Technical Guide 277, *Army Facilities Management Information Document on Mold remediation Issues*, February 2002
- American Conference of Governmental Industrial hygienist (ACGIH) *Bioaerosols: Assessment and Control*
- American Industrial Hygiene Association, *Report of microbial Growth Taskforce*, May, 2001
- OSHA Lead Standard, 29 CFR 1910.1025
- NG Pamphlet 385-16, *Guidelines For Converting Indoor Firing Ranges To Other Uses*.
- 29 CFR 1926.62, & 29 CFR 1910.1025
- 24 CFR 35.61
- OSHA Asbestos regulations: 29 CFR 1926.1101, & 1926. 1001
- EPA, *Guidance For Controlling asbestos-Containing Materials In Buildings*, June 1985

EPA NESHAP Asbestos Regulation (40 CFR 61, Subpart M)

Tables, Appendices and Attachment

Tables

Table 1, Dust Sampling For Lead Summary

Table 2, Illumination Measurements Summary

Attachments

1 Recommendations and Discussions

Appendices

1 Photographs

2 Schematic drawing of facility layout

3. Extech FootCandle/Lux Meter Certification certificate

4 Laboratory reports and chain-of-Custody Forms (C-O-Cs)

HEALTH HAZARD INFORMATION MODULE

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

ARLOC WVBTA0	INSTALLATION NGB, 2505 N. Main Street, Bamberg SC, 29003	BLDG/RM NO.
LOCATION/CODE 163 D SPT BN/AA	OPERATION/CODE ADMINISTRATIVE AND MINOR VEHICULAR MAINTENANCE AND REPAIRS (NOISE & CONFINED SPACES NOT AN ISSUE)	
SURVEY DATE June 30 th , 2005.	EVALUATOR Non-Responsive	
MACOM/CODE NATIONAL GUARD BUREAU/NG	SUBMACOM/CODE ARMY RESERVEVAR	SUPERVISOR SFC Non-Responsive
TELEPHONE/DSN NO. 803-806-1997	UNIT/ORGANIZATION CO A 163 SPT BN/	RAC III C
NO. CIV(S) 0	NO. MIL 3	NO. CONTRACTORS 0
		NO. LOC(S) 0
		NO. OTHER 0

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 6	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
NONE	ASBESTOS FLOOR TILES	% CHRYSOTILE	O & M PROGRAM	RECMD
NONE	SURFACE DUST WITH HIGH LEAD LEVELS	µg/ft ²	LEAD HAZARD WARNING SIGNS, RESTRICTED ENTRIES, LEAD REMEDIATION,	RECMD

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	X/	FULL FACE AIR PURIFYING			/
OIL	X/	1/2 FACE AIR PURIFYING			/
SOLVENTS	X/	1/4 FACE AIR PURIFYING			/
SURGICAL GLOVES	X/	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/CONDUCTIVE SHOES	/

SECTION 4: HAZARD INVENTORY DATA

CAS CODE	HAZARD DESCRIPTION	PAC	EPC
12001-29-5	Disturbance of non-friable Chrysotile ACM vinyl floor tiles and mastic to result in release of airborne asbestos fibers.	3	F
7439-92-1 (Lead)	High surface lead concentrations on the bullet backstop and other surfaces in close proximity to, and external to the bullet backstop location.	1	F

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY
Non-Responsive	Non-Responsive	E	M	Non-Responsive	Readiness NCO
		S	M		Supply SGT
		W	M		Training NCO

SECTION 6: COMMENTS

☐ No comments

☒ See attached sheet

2

1) Illumination levels throughout are inadequate for type of work performed (per reference f).

2) High concentrations of lead in settled dust was confirmed on surfaces (bookshelf, floor areas at the entrance to the bullet stop, the vault, and the entrance to/exit from the closed-off bullet stop area) in the rifle.

3) Personnel should be discouraged from entering the rifle without wearing proper PPEs.

4) Post the rifle as a "Lead Hazard Area" and restrict entry into the area until the surfaces have been decontaminated.

- 5) Non-friable ACM vinyl floor tiles and mastic (green in break room, white speckled in offices and common office areas), and the window caulking in the break room) should not be rendered friable and should be managed in accordance with EPA's "Operations and Maintenance Plan".
- 6) EPA NEHAP Asbestos Regulation must be complied with prior to commencement, and during renovation or demolition activities that will disturb the ACMs.
- 7) Blown out or missing light bulbs should be replaced, and consideration should be given to installation of supplemental lighting in areas that were below the recommended IES or ANSI RP7-1991 levels.
- 8) Discolored ceiling tiles with mold growth should be removed and replaced after the source or sources of the moisture intrusion have been identified and repaired.

ATTACHMENT 1

RECOMMENDATIONS AND DISCUSSION

1. Conduct further surface sampling to establish lead concentrations on surfaces that were not sampled during this baseline industrial hygiene survey. In the meantime identify the rifr as "lead dust contaminated", restrict unnecessary entry into the rifr, and do not disturb settled dust on surfaces that tested positive for lead concentration(s) greater than 40 ($\mu\text{g}/\text{ft}^2$).
2. Advise site personnel of the presence of high levels of lead dust on surfaces in the facility.
3. Develop a plan to remediate identified lead contamination and retain the services of a lead remediation firm.
4. Remediate surface lead contamination in accordance with NG Pamphlet 385-16 (see reference list).
5. Conduct post lead remediated clearance monitoring prior to reoccupying the affected areas. Comply with 29 CFR 1910.25, and 1910. 1025(e)(3) as applicable, and ANG's guidelines.
6. The white flaking in the kitchen (Appendix 1, photo # 36) contains 0.00992 weight %, (Appendix 3) or 99.2 parts per million lead. The paint chips are friable. Disturbance of the paint chips or the damaged surface can result in airborne lead, and subsequent personnel exposure.
7. Retain the services of a licensed lead removal firm to remove, the chips, HEPA vacuum, and wet wipe the affected surfaces with an industrial cleaner using tri-phosphate. Derived wastes must be properly containerized and characterized as to the accepted disposal method.
8. Assume that paint chips throughout contain low lead levels until testing indicates otherwise. Retain the services of a licensed lead removal firm to remove, the chips, HEPA vacuum, and wet wipe the affected surfaces with an industrial cleaner using tri-phosphate.
9. Derived wastes must be properly containerized and characterized as to the accepted disposal method.
10. The 9 in² red speckled vinyl floor tiles and mastic throughout are ACMs. The ACM floor tiles and mastic are intact, undamaged, and not friable in

their present state and will not present a potential health hazard unless they are rendered friable.

11. Develop and implement an asbestos "Operation & Maintenance Plan" in accordance with USEPA guidelines (see reference list), and enforce until all ACMs have been removed from the facility
12. Comply with EPA NEHAP Asbestos Regulation prior to commencement, and/or during renovation or demolition activities (see references).
13. Prepare and post HazMat lists at entrances to storage areas with hazardous materials. Also keep MSDS in storage building(s), and at a central location.
14. Remove/replace damaged, mold infested, discolored and missing ceiling tiles throughout.
15. Replace missing light bulbs throughout
16. Repair water leaks in the locker room.
17. Ensure that fire extinguishers are inspected at specified intervals.

APPENDIX 1

Photographs



Photo # 1



Photo # 2



Photo # 3



Photo # 4



Photo # 5



Photo # 6



Photo # 7



Photo # 8



Photo # 9



Photo # 10



Photo # 11



Photo # 12



Photo # 13



Photo # 14



Photo # 15



Photo # 16



Photo # 17



Photo # 18



Photo # 19



Photo # 20



Photo # 21



Photo # 22



Photo # 23



Photo # 24



Photo # 25



Photo # 26



Photo # 27



Photo # 28



Photo # 29



Photo # 30



Photo # 31



Photo # 32



Photo # 33



Photo # 34



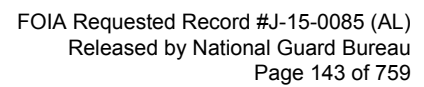
Photo # 35



Photo # 36

APPENDIX 2

Schematic of Site Layout



APPENDIX 3

Extech FootCandle/Lux Meter Certification certificate



CERTIFICATE OF CALIBRATION

LIGHT METER

Manufacturer: EXTECH Calibration Date: June 24, 2005
 Model Number: FootCandle/Lux Meter Date Due: June 24, 2006
 Serial Number: K61660 Reference Number: CIH-EXTECH-K61660
 Service Order: N/A

Reference (ft-c)

58.4
 127.6
 324.0
 550.0
 1065.0

Actual (ft-c)

57.9
 127.0
 322.0
 551.0
 1060.0

Manufacturer	Description	Model No.	Serial No.	Due Date
TEKTRONIX	LIGHT METER	J16	J6311	2/18/2005

Tests performed with a 200W Tungsten Bulb at a distance of 50cm. Each value listed above is an average of three data points.

Calibrated By:

Non-Responsive

Date: 6-24-05

107-G Dunbar Avenue • Oldsmar, FL 34677 USA • PH: (813) 891-8830 • FX: (813) 854-1544
 Toll Free: (888) 873-2443 • Website: www.cihequip.com

APPENDIX 4
Laboratory reports and chain-of-Custody Forms
(C-O-Cs)



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report

Client Name: National Guard Bureau Region-South IH

Project Name: NTL GRD BASELINE I.H. SURVEY

Project Number: 1432

NVLAQ

Lab ID# 102082-0

AES Job Number: 0507237

Page 1 of 1

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
BMB-ASB-01	0507237-001A	Floor Tile and Mastic	10	ND	ND	ND	ND	ND	Tile
Layer: 1									
BMB-ASB-01	0507237-001A	Floor Tile and Mastic	ND	ND	ND	ND	ND	ND	Black Mastic
Layer: 2									
BMB-ASB-02	0507237-002A	Floor Tile and Mastic	10	ND	ND	ND	ND	ND	Tile
Layer: 1									
BMB-ASB-02	0507237-002A	Floor Tile and Mastic	ND	ND	ND	ND	ND	ND	Black Mastic
Layer: 2									
BMB-ASB-03	0507237-003A	Floor Tile and Mastic	10	ND	ND	ND	ND	ND	Tile
Layer: 1									
BMB-ASB-03	0507237-003A	Floor Tile and Mastic	ND	ND	ND	ND	ND	ND	Black Mastic
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

Analytical Environmental Services, Inc.

Date: 12-Jul-05

CLIENT: National Guard Bureau Region-South IH
Project: Ntl. Grd. Baseline I.H. Survey
Lab ID: 0507278-001

Client Sample ID: BMB-PB-01**Collection Date:****Matrix:** PAINT

Analyses	Result	Reporting Limit	Qual	Units	BatchID	Dilution Factor	Date Analyzed
TOTAL METALS IN PAINT							
Lead	BRL	0.00982	PAINT	(PAINT)	59758	1	Analys EM 7/11/2005 8:25 AM

Qualifiers:

* Value exceeds Maximum Contaminant Level
 BRL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAP certified
 B Analyte detected in the associated Method Blank

E Estimated (Value above quantitation range)
 S Surrogate Recovery outside accepted recovery limits
 Narr See Case Narrative
 NC Not Confirmed

Page 1 of 1

Analytical Environmental Services, Inc.

Date: 7/12/2005

**TOTAL LEAD IN WIPE SAMPLES
N7082**

CLIENT: National Guard Bureau Region-South IH
 Project: Ntl. Grd. Baseline I.H. Survey
 Delivery Order: PJMS05041901
 PO No:

Lab Order: 0507278
 Date Received: 7/7/2005 9:50 AM
 Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0507278-002A	BMB-PB-02	136	µg. Total	20	1		7/11/2005	EM
0507278-003A	BMB-PB-03	230	µg. Total	20	1		7/11/2005	EM
0507278-004A	BMB-PB-04	35	µg. Total	20	1		7/11/2005	EM
0507278-005A	BMB-PB-05	1710	µg. Total	20	1		7/11/2005	EM
0507278-006A	BMB-PB-06	BRL	µg. Total	20	1		7/11/2005	EM
0507278-007A	BMB-PB-07	55	µg. Total	20	1		7/11/2005	EM

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

Results are blank corrected where applicable

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

NGB-AVN-SI

10 July 2003

MEMORANDUM FOR The Alabama Army National Guard, ATTN: LT. [REDACTED]
[REDACTED] Armory Supervisor, Bridgeport Armory, 2102 5th Street, Bridgeport, Alabama
35740.

SUBJECT: Industrial Hygiene (IH) Survey of the Bridgeport National Guard Armory.

1. References.

- a. Report submitted 9 July 2003, Industrial Hygiene Survey, Balch Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at the Alabama National Guard Armories.

b. Mr. [REDACTED] of S. C. Smith Inc was awarded the contract to conduct the survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

- a. Follow all recommendations made in reference 1.a., requesting industrial hygiene (IH) services where needed to complete the recommendations.
- b. Use the report to help in correcting all deficiencies noted by the contractor.
- c. Consider additional Industrial Hygiene services to monitor operations that were not looked at or surveyed during the contract visit, especially if this will help eliminate health hazards and reduce medical surveillance cost.
- d. 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.

5. If additional information is needed about the contractors report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ **Non-Responsive** Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711

ALABAMA ARMY NATIONAL GUARD

BRIDGEPORT ARMORY
BRIDGEPORT, ALABAMA

MEMORANDUM FOR

Alabama Army National Guard
Bridgeport Armory
LT **Non-Responsive**
2102 5th Street
Bridgeport, Alabama 35740

SUBJECT

Initial Baseline Industrial Hygiene Survey of the Bridgeport Armory performed 12 June 2003 in Bridgeport, Alabama.

BACKGROUND

INTRODUCTION

At the request of Mr. **Non-Responsive** of the National Guard Bureau Region South Industrial Hygiene Office, an initial baseline industrial hygiene survey was performed at the Bridgeport Armory in Bridgeport, Alabama on 12 June 2003. The purpose of the survey was to perform an initial baseline industrial hygiene survey to evaluate potential health hazards present at the armory.

SITE DESCRIPTION

The facility houses the A Battery Det 1, 1-203rd ADA (Pc). There are no full time personnel at this facility. The one story building contains several administrative offices, one classroom, a drill hall, and a kitchen. A firing range is present at this facility and is being used as storage space. The indoor firing range was inaccessible to survey personnel. Refer to Building layout in Appendix C.

SCOPE OF WORK

The work included collecting wipe samples for lead, bulk samples for suspect asbestos containing building material, noise readings, illumination levels, and an evaluation of the ventilation system as it pertains to indoor air quality. A list of occupational health programs and procedures were verbally covered with the armory personnel.

METHODOLOGY

Lead wipe samples were collected from surfaces that showed signs of lead contamination in armories that have a renovated, inactive, or closed indoor firing range (IFR), kitchen or mess hall storage areas, indoor drill halls, and storage rooms with weapons vaults. The samples were collected in accordance to instructions published by Region South National Guard Bureau, which required the

Bridgeport Armory
Survey Date: 12 June 2003

use of unscented baby wipes to wipe one square foot of surface. Samples were then placed in a sealed plastic bag and sent to an American Industrial Hygiene Associations (AIHA) accredited laboratory for analysis. Asbestos bulk samples and lead paint chips were collected from suspect friable and damaged building material. Each bulk sample was placed in a sealed bag and sent to an AIHA laboratory for analysis. All instruments used for assessment were factory calibrated and calibrated prior to the survey as applicable. Illumination readings were taken on work surfaces and approximately four feet from the floor.

FINDINGS AND DISCUSSION

LEAD WIPE SAMPLES

Four wipe samples were collected from areas of the indoor firing range, kitchen, supply and other storage areas as listed in the table below.

SAMPLE NUMBER	SAMPLE LOCATION	MICROGRAMS OF LEAD (μ g) PER SQUARE FOOT
1	Kitchen fridge	BRL
2	IFR floor	58.0
3	Drill Hall Floor	BRL
4	Drill Hall coke machine	51.0

*Below Reporting Limit

The Environmental Protection Agency standards (40 CFR 745) indicate lead in dust levels above 40 micrograms per square foot on bare and carpeted floors is considered dangerous for common areas. The samples in and around the indoor firing range and in the drill hall were above required limits.

ASBESTOS SUSPECT BUILDING MATERIAL

Sampling for asbestos was limited to damaged material or material that could pose an exposure risk. No friable suspect material was found.

NOISE SURVEY

Area noise levels are well within the Army National Guard limit of 85 dBA and the Occupational Safety and Health Administration (OSHA) regulated limit of 90 dBA over an eight-hour period.

ILLUMINATION SURVEY

Lighting throughout the facility was in poor condition and blown in many areas. There was only one workstation set up in the facility. The American National Standard Institute/Industrial Engineering Society (ANSI/IES) recommends a minimum illumination of 50 to 100 foot candles for administrative and kitchen areas, and 20 to 50 foot-candles for storage areas. Luminance of 50 to 100 foot-candles is recommended for performance of visual tasks of medium contrast or small size.

such as reading, pencil handwriting, and poorly printed, or reproduced material. Depending of the type of display, background luminance of 30 to 60 foot-candles is recommended for VDT work.

BUILDING CONDITION

The building was constructed in 1963. Some standing water was found in the classroom area. Leaks and maintenance problems were reported with the roof. Water damage could be seen in the administrative area, hallway, and classroom. The armory is cooled with individual heating and cooling units.

HAZARD COMMUNICATION

Material Safety Data Sheets were unavailable for assessment.

RADIATION PROTECTION PROGRAM

No radioactive items are stored at this facility.

ERGONOMICS

Many workstations were not set up to provide neutral postures and appropriate ergonomically correct positions. Consideration should be given to providing all full time employees that spend the majority of their working time at a computer terminal ergonomic training or awareness. Such awareness should emphasize the importance of proper posture and set up of the workstation to fit the user.

PERSONAL PROTECTIVE EQUIPMENT

Normal duties of full time employees at the armory do not require the use of personal protective equipment (PPE).

RECOMMENDATIONS

- 1) All items that are contaminated with lead should be thoroughly decontaminated with a detergent and water solution. Care should be taken to wipe down tables where weapons are issued and cleaned. Kitchen areas should be thoroughly cleaned on a regular basis and especially before serving personnel.
- 2) Personnel should be prohibited from eating, drinking, smoking, chewing tobacco or gum, or applying cosmetics in supply areas and should be instructed to clean hands with soap and water before doing any of these. Remove all refrigerators, cups, and other eating utensils from supply areas.
- 3) Replace all blown lighting. Upgrade lighting measurements as required. Lighting can be upgraded in the following ways:
 - Replace blown or broken lighting
 - Paint wall a light color
 - Clean existing light fixtures
 - Rearrange furniture to make better use of available light
 - Provide supplemental or task lighting
- 4) Develop a maintenance schedule for monitoring, inspecting and cleaning HVAC components such as outside air intakes, outside air dampers, air filters, drain pans, heating and cooling coils, the interiors of air handling units, fan motors and belts, air humidification, controls and cooling towers. The schedule should also ensure that any leaks or standing water are identified, repaired, and prevented. Proper repairs and maintenance of the building infrastructure and interior surfaces can prevent water damage and moisture buildup which may lead to further indoor air quality issues.
- 5) An ergonomics survey should be completed for all supply and administrative personnel as a preventative measure to document and address any and all ergonomic concerns or problems. Provide ergonomics training and awareness to all employees who spend the majority of their time working at a computer terminal.

Bridgeport Armory
Survey Date: 12 June 2003

TECHNICAL ASSISTANCE

*For technical assistance regarding information found in this report or the performed survey please contact Mr. **Non-Responsive** Regional Industrial Hygienist at the National Guard Bureau Region South Industrial Hygiene Office at 1.800.326.0262.*

Non-Responsive

Industrial Hygienist
Environmental Management Solutions

Report Date: 20 June 2003

Page 7

APPENDICES

APPENDIX A

- American conference of Governmental Industrial Hygienist (ACGIH), Industrial Ventilation, A Manual of Recommended Practice, 23rd Edition, 1998. American National Standards Institute (ANSI), Illuminating Engineering Society (IES), Industrial Lighting, 1991.
- Army Regulation (AR) 11-34, The Army Respiratory Protection Program, 1990.
- Army Regulation (AR) 40-5, Preventative Medicine, 15 October 1990.
- Army Regulation (AR) 385-10, The Army Safety Program, 29 Feb 2000.
- NGR 385-10, Army National Guard Safety and Occupational Health Program, 7 October 1988.
- TB MED 503, The Army Industrial Hygiene Program, February 1985.
- Title 29, Code of Federal Regulations (CFR), 1999, revision, Part 1910, Occupational Safety and Health Standards.
- TG 022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide, October 1975.
- TG 141, US Army for Health Promotion and Preventative Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, November 1997.

APPENDIX B

[illegible]

Gloves		Respirator		Body		Head and Feet	
Manufacturer's Description (10 characters max)		Manufacturer's Description (10 characters max)		Manufacturer's Description (10 characters max)		Manufacturer's Description (10 characters max)	
e° R U		e° R U		e° R U		e° R U	
acid		abrasive blasting hood		cold weather boots/shoes		cold weather boots/shoes	
cold surfaces		disposable		cold weather clothing		hard hats	
hot surfaces		full face air purifying		coveralls		impermeable boots	
NBC agents		1/2 face air purifying		full body suit		safety shoes (conductive)	
oil		powered air purifying		heat reflective		safety (nonconductive)	
solvents		1/4 face air purifying		vests		other	
surgical gloves		self-contained		safety belts/harness		other	
weather / cotton		other		special pump, climbing		other	
other				other		other	
eyes and face		hearing					
chemical splash							
full face shield							
chem/safety impact							
safety impact							
safety impact							
welding helmet							
sunglasses							
riding goggles/goggles							
user eye protection							
other							

ACO ADM DSA DSN LAB LCK
RAD ECB EDN DSN PAK PAK

CAB code

POKMSDD	P	0	Y	D	I	X	X	X	X	'
POFOOTHZ	P	0	9	T	R	E	9	9	X	
POFLYPRD	P	0	L	1	P	T	1	N	G	
POEYBUZA	7	4	3	9	-	9	2	-	1	
POFLAUIAZ										
POLEPTNG										
POSHUUPOR										
POHOTOUE										
POELSHOCK										
COLLUEON										

EPC

A										
F										
A										
A										

FAC

2										
3										
3										
3										

Hazard Description

Computer Use / Video Display Terminal
Exposure Physical Stress
Heavy lifting
Lead

Social Security Number or Unique Identifier

Last Name (20 characters max)

First Name (20 characters max)

Category

Sex

MI

Personal data provided by the facility is attached to this form

Insert Privacy Act Statement

Comments

Operation described is require, potentially, issue critical unit items to include weapons and ammunition

This operation was explained to the evaluator, 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 form

BEST AVAILABLE COPY

[illegible]

e* = evaluator's recommendation or agreement.

[illegible]

ACO ADM DSA DSN LAS LCX
RAD ECB EPL RNS SPR WEL

Back page

BEST AVAILABLE COPY

This operation was captured in the following, but was not actually shown.

There is a table that...

Participation in participatory ergonomics

APPENDIX C

Bridgeport Armory



Air-Conditioning Unit



Heating Unit



Indoor Firing Range Converted to Storage



Drill Hall



Kitchen



Administrative Area



Water Damage



Water Damage

PARKING LOT / ASSEMBLY AREA

5TH STREET

EXIT

ASSEMBLY AREA IN

FRONT PARKING LOT

6

DRILL HALL

YOU ARE HERE

5

EXIT

EXIT

4

STORAGE

EXIT

DISPATCH

STORAGE

STORAGE

STORAGE



APPENDIX D

Analytical Environmental Servs, Inc.

Date: 6/20/2003

**TOTAL LEAD IN WIFE SAMPLES
N7082**

CLIENT: Environmental Management Solutions
Project: Bridgeport Armory
Project No: Bridgeport Ammo
PO No:

Lab Order: 0306334
Date Received: 6/17/2003 9:45:0
Matrix: Wipe
Analyst: SSS

Laboratory ID	Client Sample ID	Results	Units	MDL	DF	Date Collected	Date Analyzed
0306334-001A	1	BRL	µg. Total	2.83	1	6/12/2003	6/19/2003
0306334-002A	2	SLD	µg. Total	2.83	1	6/12/2003	6/19/2003
0306334-003A	3	BRL	µg. Total	2.83	1	6/12/2003	6/19/2003
0306334-004A	4	SLD	µg. Total	2.83	1	6/12/2003	6/19/2003

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

DF - Dilution Factor

Page 1 of 1

BULK SAMPLE DATA <i>For use of this form see USAEHA TG 141; the proponent is MCHB-DC-LLC</i>				
Return Address (complete address including zip code) S.C. Smith, Inc. 887 Heritage PL Decatur, GA			Phone (Complete Area/Local/Ext) Non-Responsive 404.728.0799 ph Aishaboyel 770.459.4371	
Sampled Installation Bridgeport Armory		Project Number AL060003-01		ARLOC <div style="border: 1px solid black; width: 100px; height: 20px; display: flex; align-items: center; justify-content: center;"> <div style="width: 25px; height: 15px; border: 1px solid black;"></div> <div style="width: 25px; height: 15px; border: 1px solid black;"></div> <div style="width: 25px; height: 15px; border: 1px solid black;"></div> <div style="width: 25px; height: 15px; border: 1px solid black;"></div> </div>
Samples Collected By Non-Responsive		Date Collected 12 June 2003		Date Shipped 17 June 2003
Description of Operation Lead wipe samples of Armory				Location (BLOG/AREAU)
Associated Complaints (be specific) NONE				
Associated Air Samples If yes, list sample numbers <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
Label Information				
Trade Name NA		NSN NA		Manufacturer NA
Address NA			MSDS Attached <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	
Analysis Desired Lead				
Lab Use Only	Sample No.	Constituents	Results	Remarks
	1	Kitchen fridge		
	2	IFR Floor		
	3	Drill Hall Floor		
	4	Drill Hall (coker)		
Comments to Lab:				
Lab Use Only				
Analyst (initials)		Reviewed By (initials)		Date Received
Date Reported		Procedures Performed		
Comments:				



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

NGB-ARS-SEIH

14 December 2006

MEMORANDUM THRU COL Charles Griffin, Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC [REDACTED] Readiness NCO, 299 Eufaula Ave, Clayton, Alabama 36016.

SUBJECT: Industrial Hygiene Special of the Clayton Armory.

1. References.

- a. Report completed 5 December 2006, Industrial Hygiene report for Clayton Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [REDACTED] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Clayton Armory.

b. Karen Singleton of OSHA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines for converting indoor firing ranges to other uses and NG REG 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges. (RAC 1)**

b. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

c. **Hazardous communication or HAZCOM refresher training.** Continue with annual HAZCOM training. Dated and signed records should be maintained of all HAZCOM training administered.

d. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin.
RAC 3, AR 40-5

e. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non- functioning light fixtures.

f. 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. RAC 3 AR 40-5

g. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

h. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact **Non-Responsive**
Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ **Non-Responsive** Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC **Non-Responsive** Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

Alabama Army National Guard
Clayton Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: SFC [REDACTED]
Armory Supervisor, 1128 Transportation Company, Clayton, Alabama 36016

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of 1128 Transportation Company, 299 Eufaula Avenue Clayton, 36016

November 24, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

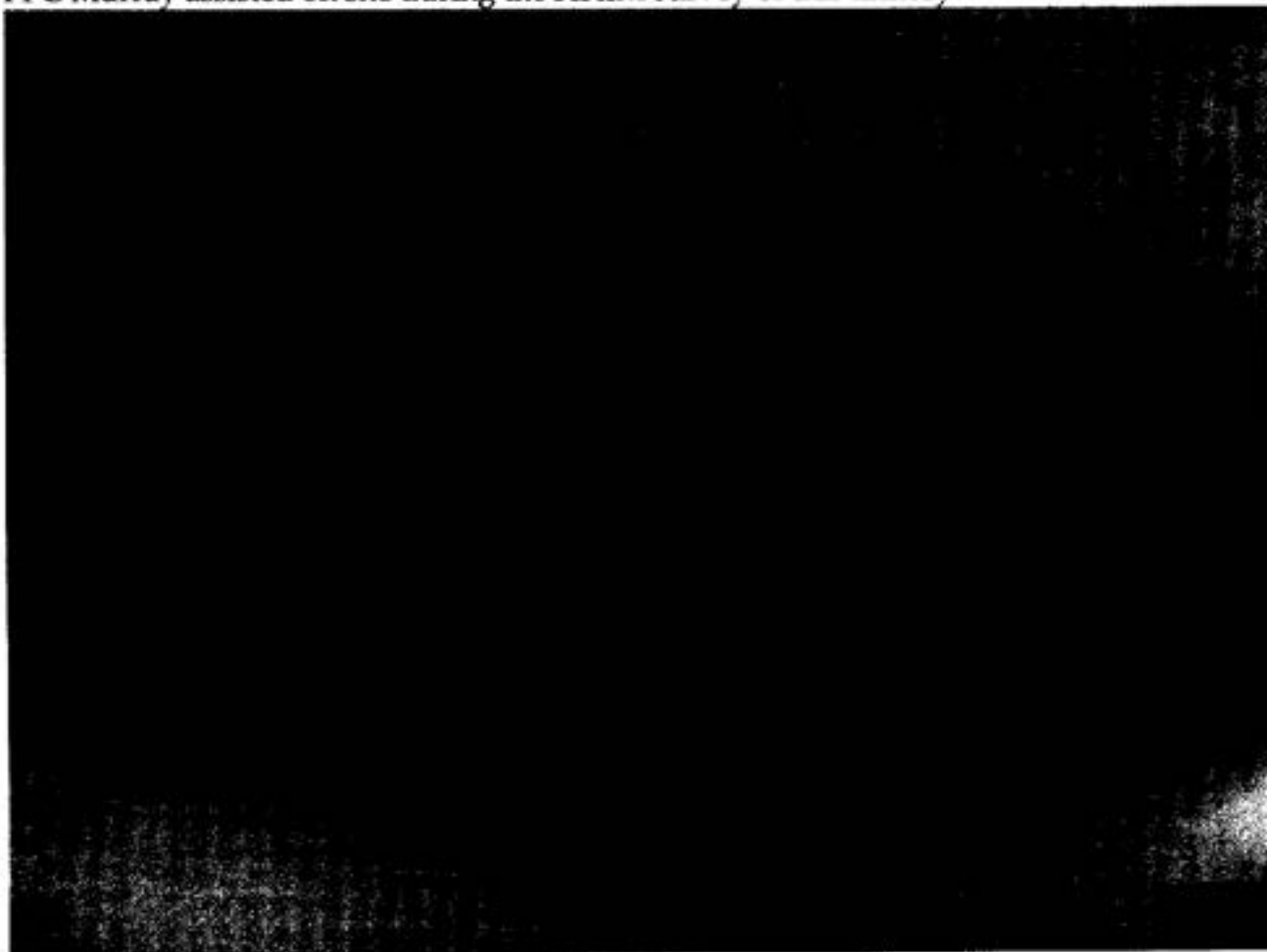
Oshes II Industrial Hygiene Consulting
IH Survey Clayton Amory
Nov 2006

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at 1128 Transportation Company, Clayton, Alabama.

3. **Background:** 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.

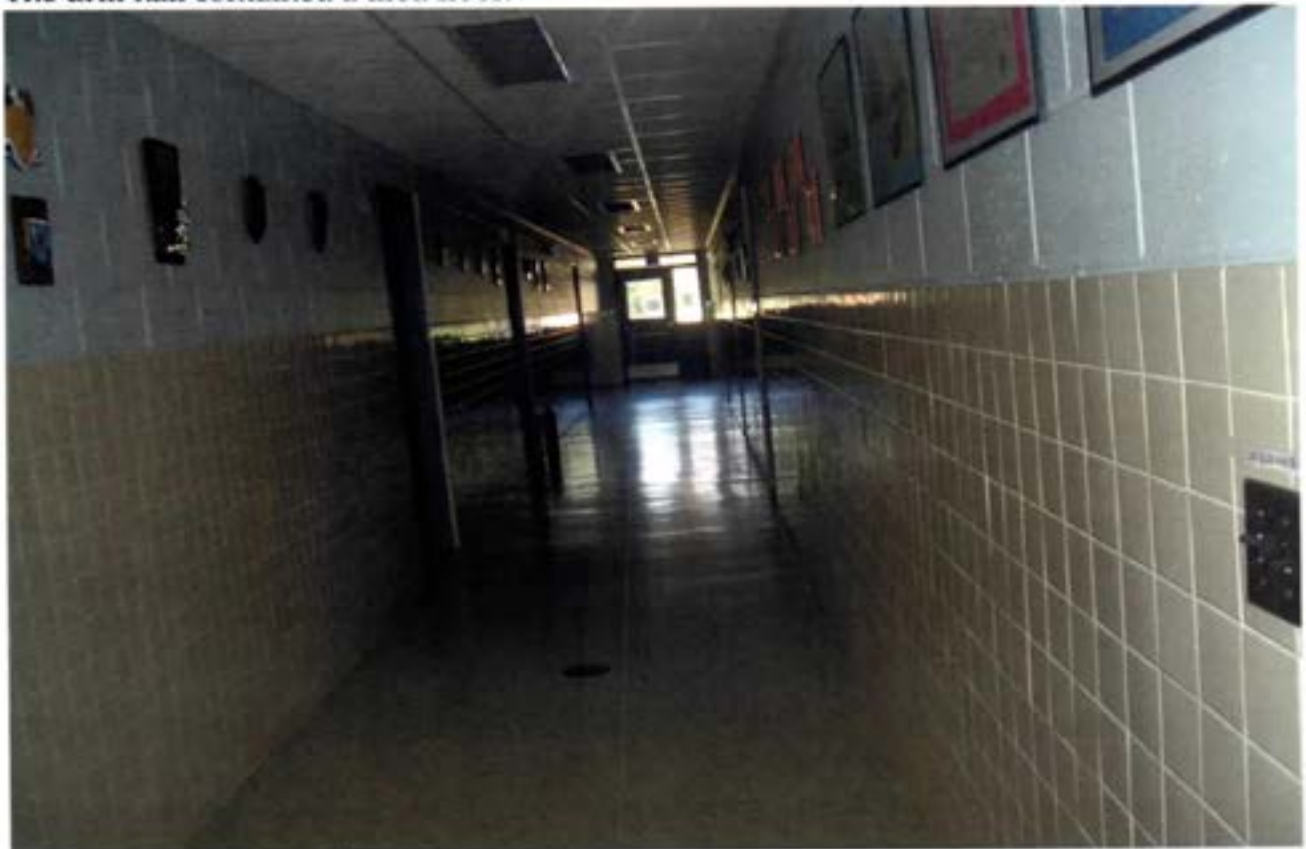
3. Findings

Armory Site Description: 1128 Transportation Company is housed in Fort Malcomb Turner Armory. Four full time individuals perform administrative duties. The armory was constructed in 1970 and is approximately 9,000 square feet. It contains several offices/five administrative areas, one combined kitchen/mess hall, supply rooms, weapons room/vault and an indoor firing range. The armory was well kept and there was no evidence of leaking. Ceiling and floor tile was intact with no visible signs of friability. PFC Murray assisted on site during the HHIM survey of this armory.





The drill hall contained a tiled floor.



(hallway in the armory)



In the administrative office area of the armory phone answering, computer use and paper generation is performed.





Faxing and copying room

The kitchen is not used to prepare food. (below)





Indoor firing range: It was stated that it had not been used in years. Wipe samples were obtained at the firing stations and the bullet stop. The results will be addressed later in the report. The photograph below is the bullet stop.





The solvent bath was located near an exit door of the drill hall. It was stated that it is used on drill weekends to clean weapons.

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





A noise level survey was performed of the vehicles and generators.

b. **HAZCOM:** HAZCOM training had been performed prior to this survey. MSDS were available and evaluated for the armory's inventory.

c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	75.1-----77.4	50----100
Class room	67.0-----72.2	50----100
Hallways	48.3-----50.3	50----100
Kitchen	47.8-----52.2	50----100
Admin areas	59.7-----68.5	50----100
Firing range	37.5-----39.7	5-----10
Vault	21.1-----32.9	50----100
Supply	15.6-----17.3	50----100
Recruiter's office	65.2-----80.5	50----100

The majority of readings are at the IES lighting standard for foot candles for each area.

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



- e. **Wipe sampling:** Wipe samples were obtained from the following areas : the bullet backstop of the firing range, dusty horizontal surfaces in the assembly/drill hall area and the kitchen . Thirty-two wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. Sample results were below reading limits (BRL) in the kitchen and the drill hall. Twenty-six samples were obtained in the firing range. All 26 samples indicated the presence of lead on the bullet stop. Readings from top left to the bottom right were as indicated in the table below:

Lead Sample Results of Bullet Stop

761	20400	84500	13100	13800	1520	71100	168000	251
87100	21100	140000	579	17200	62100	676	86600	14400
169	1580	94	56	29	44	78		

These results are in micrograms.

- f. **Motor Pool Area:** The motor pool area located behind the armory. Vehicles used to during drill. Armory's personnel perform no maintenance operations or vehicle repairs.
- g. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.
- h. **Arms Room/Weapons Vault:** Weapons are stored 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.
- i. **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 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office

ATTN: LTC **Non-Responsive**

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office

ATTN: Major **Non-Responsive**

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

Oshes II Industrial Hygiene Consulting
IH Survey Clayton Amory
November 2006

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	1595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625

Enclosure No. 1

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DD2214 -Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)							
1. DATE (YYYYMMDD) 2006 / 11 / 13				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</div> <div style="font-size: small; margin-top: 5px;">1- INITIAL SURVEY 2- RESURVEY 3- OTHER</div>			
3. SOUND LEVEL METER		4. MICROPHONE		5. CALIBRATOR			
a. MANUFACTURER Exttech		a. MANUFACTURER		a. MANUFACTURER Exttech			
b. MODEL 407703		c. SERIAL NO. 041002810		b. MODEL 7703A		c. SERIAL NO. 4XX69	
d. LAST ELECTROACOUSTIC CALIB DATE YR/ M/D 06/03/06		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>				7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>			
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Clayton Armory 229 Eufaula Avenue Clayton, AL 36016					9. PRIMARY SOURCE OF NOISE Trucks		
					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 (109-118)
Hemmet	S		84.1			X	
Bull dozer	S		90.5			X	
10 KW Generator	S		88.3			X	
5 KW Generator	S		84.6			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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.							
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) All who work in this shop area							
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION							
a. NAME (Last, First, Middle Initial) SVC [REDACTED]			b. TELEPHONE (Include area code) 334-775-8396			c. ORGANIZATION Clayton 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

Enclosure No. 3

Inventory

OIL

Transmission fluid

Brake Fluid

Grease

Penetrating Oil

Antifreeze

Gear Oil

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Laboratory Analysis

Enclosure No. 4

Analytical Environmental Services, Inc.

Date: 11/28/2006

TOTAL LEAD IN WIPE SAMPLES

N7082

CLIENT: OSHEA II

Lab Order: 0611B63

Project: Clayton

Date Received: 11/20/2006 2:28 PM

Delivery Order:

Matrix: Wipe

PO No:

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DP	Date Collected	Date Analyzed	Analyst
0611B63-001A	11101	761	µg. Total	20	1	11/6/2006	11/24/2006	JY
0611B63-002A	11102	20100	µg. Total	488	24.39	11/6/2006	11/24/2006	JY
0611B63-003A	11103	84500	µg. Total	2000	104.7	11/6/2006	11/24/2006	JY
0611B63-004A	11104	13100	µg. Total	303	19.64	11/6/2006	11/24/2006	JY
0611B63-005A	11105	15800	µg. Total	403	20.13	11/6/2006	11/24/2006	JY
0611B63-006A	11106	38000	µg. Total	1350	67.49	11/6/2006	11/24/2006	JY
0611B63-007A	11107	1520	µg. Total	96	7.19	11/6/2006	11/24/2006	JY
0611B63-008A	11108	71100	µg. Total	2020	101.2	11/6/2006	11/24/2006	JY
0611B63-009A	11109	168000	µg. Total	5780	289	11/6/2006	11/24/2006	JY
0611B63-010A	111010	251	µg. Total	20	1	11/6/2006	11/24/2006	JY
0611B63-011A	111011	87100	µg. Total	2170	108.6	11/6/2006	11/24/2006	JY
0611B63-012A	111012	21100	µg. Total	484	24.22	11/6/2006	11/24/2006	JY
0611B63-013A	111013	140000	µg. Total	5200	260	11/6/2006	11/24/2006	JY
0611B63-014A	111014	579	µg. Total	20	1	11/6/2006	11/24/2006	JY
0611B63-015A	111015	17200	µg. Total	442	22.11	11/6/2006	11/24/2006	JY
0611B63-016A	111016	62100	µg. Total	2000	100	11/6/2006	11/24/2006	JY
0611B63-017A	111017	676	µg. Total	20	1	11/6/2006	11/24/2006	JY
0611B63-018A	111018	36600	µg. Total	2170	108.5	11/6/2006	11/24/2006	JY
0611B63-019A	111019	14400	µg. Total	405	20.25	11/6/2006	11/24/2006	JY
0611B63-020A	111020	169	µg. Total	20	1	11/6/2006	11/24/2006	JY
0611B63-021A	111021	1580	µg. Total	55	2.77	11/6/2006	11/27/2006	JY
0611B63-022A	111022	93	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-023A	111023	56	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-024A	111024	29	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-025A	111025	44	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-026A	111026	78	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-027A	111027 D	NRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-028A	111028 D	NRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-029A	111029 D	NRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-030A	111030 D	NRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B63-031A	111031 E	NRL	µg. Total	20	1	11/6/2006	11/27/2006	JY

Qualifiers: NRL = Not Detected at the Reporting Limit

DP = Detection Factor

Results are blank corrected where applicable

Page 1 of 2

Analytical Environmental Services, Inc.

Date: 11/28/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: ONEIDA CO

Lab Order: 0611B63

Project: Clayton

Date Received: 11/20/2006 2:28 PM

Delivery Order:

Matrix: Wipe

PO No:

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0611B63-032A	111032 K	NR1	µg Total	20	1	11/6/2006	11/27/2006	JY

Qualifier:

NR1 - Not Detected at the Reporting Limit

DF - Dilution Factor

NR is not blank corrected where applicable

Page 2 of 2

BEST AVAILABLE COPY
Full Time Personnel

SFC [REDACTED]
SSG [REDACTED]
SGT [REDACTED]
SGT [REDACTED]

Enclosure No.5

BEST AVAILABLE COPY

HHIM

Enclosure No.6

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC_01000

INSTALLATION_AARNG

BLDG_____

ROOM_____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
AA	ADD	YR 06/ 11/13	KJS	NG
SUPERVISOR		ORGANIZATION		RAC
SFC [REDACTED]		Clayton armory		3
PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	# MIL
334-7758396	x /	6-8 hours/ day	4 /	/
LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	1	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE	REQUIRED	UTILIZED	RESPIRATOR	R	U	EYES/FACE	R	U
GLOVES			AIRLINE			CHEM/SPLASH		
ACID			ABRASIVE BLASTING HOOD			FULL FACE SHIELD		
COLD SURFACE			DISPOSABLE			CHEM/SAF IMPACT	x	x
HOT SURFACE			FULL FACE AIR PURIFYING			SAFETY IMPACT		
NBC AGENTS			1/2 FACE AIR PURIFYING			WELDING HELMET		
OIL			POWERED AIR PURIFYING			WELDING GOGGLES		
SOLVENTS			1/4 FACE AIR PURIFYING			LASER EYE PROTECT		
SURGICAL GLOVES			SCBA			OTHER		
OTHER								

EARS/ HEARING	R	U	BODY	R	U	HEAD AND FEET	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	POnoiseco	2	0	Noise, continuous
POFOOTHAZ	PÖstress	3	0	Mental / physical stress
POFLYPROJ	PÖlifting	3	0	Heavy lifting
POEYHAZA	PÖeyehaza	2	A	Eye Hazards
POFLAMMHAZ				
POLIFTING				
POSHARPOBJE				
POELSHOCK				
COLUBEOL				

DESCRIBED OPERATION

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

PERSONNEL LIST ATTACHED

BEST AVAILABLE COPY

Facility layout

Enclosure No. 7

FIRE EVACUATION DIAGRAM

SUPPLY

BEST AVAILABLE COPY

FIRING RANGE

OBSERVATION ROOM
NBC ROOM

FLAMMABLE STORAGE
KITCHEN OFFICE

KITCHEN

VAULT

OFFICE

STORAGE

DRILL HALL

MAINT & DISPATCH

COMO ROOM

MALE LATRINE

MALE SHOWER

LATRINE

TRAINING ROOM

ELECTRICAL ROOM

FEMALE

LATRINE & SHOWER

MESS STORAGE

CLASS ROOM #2

CLASS ROOM #1

LIBRARY

OFFICE

OFFICE

OFFICE

OFFICE

OFFICE

OFFICE

OFFICE

YOUR LOCATION, "YOU ARE HERE"

YOUR LOCATION, "YOU ARE HERE"

EXIT

EXIT

EXIT

EXIT



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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COL [REDACTED] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC [REDACTED] Facility Supervisor, 1000 23rd Street, Cullman, AL 35055.

SUBJECT: Industrial Hygiene Survey of the Cullman Armory.

1. References.

- a. Report completed 19 February 2007, Industrial Hygiene report for the Cullman Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the Cullman Armory.

b. Ms. [Non-Responsive] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 1)

b. Have FMO contract a structural Engineer to determine the extent of damage and the stability of the building.

c. Follow the remainder of the contractor's recommendations on page 5 of the contractors report.

d. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ. [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

23 February 2007

MEMORANDUM FOR: Cullman Armory, ATTN: SFC [REDACTED] 1000 23rd Street, Cullman, Alabama 35055

SUBJECT: Industrial Hygiene Survey of Cullman National Guard Armory, Cullman, Alabama

I. 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 Cullman National Guard Armory, Cullman, Alabama

2. 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 the Cullman National Guard Armory, Cullman, Alabama on 15 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory. The building was visually examined and employees were interviewed for data related to the building and the operations performed. The illumination was measured and lead wipe samples were taken in various areas of the Armory.

3. Facility Description. The facility is one story structure. The Wildlife & Freshwater Fisheries divisions of The State of Alabama's Department of Conservation & Natural Resources are tenants in the facility. The facility houses administrative areas, one Supply Room, two Arms Rooms and a drill hall and a deactivated indoor firing range.

4. Findings.

a. Large cracks are present on the exterior façade and interior walls of the facility. The building was struck by a tornado in 1987, causing extensive damage to the Armory. The tornado destroyed the roof and walls of the building. (Photos of the tornado damage are at the enclosure of the report). Construction documentation was not available during the survey. Cinder block interior walls have separated, producing large cracks between the mortared joints. Expansion insulating foam has been applied as a self-help project by the facility. The cracks in the walls have expanded, loosening and lessening the foams insulating effects. Water stains are on the walls and ceiling tiles in many locations throughout the facility, indicating water intrusion from the roof. The deactivated indoor firing range has visible mold growth on the walls and ceiling tiles.

b. A heavy accumulation of dust and dirt are on the supply and return air grills throughout the facility. The facility has three air handling units. The filters in the systems had not been replaced until the survey. Each unit accommodates one filter. The air filters had a heavy accumulation of dust. New air filters were purchased locally and replaced during the survey. Lead wipe samples taken from the supply side of all three air filters were positive for Lead. The presents of Lead was found on the return air grill in the Orderly room. The Orderly room air is managed by AHU-1, located off the drill hall.

c. Illumination was surveyed throughout the building. A diagram of illumination measurements can be found within the enclosure of this report. The areas listed below are below the standards required in reference f. The findings are as followed in Foot-candles (FC):

Table 1

AREA/LOCATION	MEASURED FC	REQUIRED FC
Wildlife office	26.5-55.0	50-75
Orderly room	30.5	50-75
Classroom	12.9-60.3	50-75
Air handling room 1	2.5	10-15

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

Page 2

SUBJECT: Industrial Hygiene Survey of Cullman National Guard Armory, Cullman, Alabama

d. A deactivated indoor firing range is currently being used for storage of excess kitchen items, desk and chairs. The target carriers and bullet trap are present. The sand is still present in the pit. The acoustic material on the walls and ceiling is present. There was no documentation that the range was cleared prior to conversion to a storage area. Mold growth is visible on the walls and ceiling tiles. Twenty-two Lead wipe samples and one blank were taken in various locations throughout the range and the Armory. One bulk sand sample was obtained from the range pit. Sample locations and results are in the table 2 below.

Table 2

Sample #	Location	Results
1	Backstop center 6 ft up	1100 ug/ft ²
2	Backstop left 4 ft up	BRL
3	Floor 1 ft from pit center	5500 ug/ft ²
4	Top of steam table right side near pit	785 ug/ft ²
5	Acoustic wall right side 5 ft up	37 ug/ft ²
6	Center range floor	296 ug/ft ²
7	Acoustic wall left side 6 ft up	195 ug/ft ²
8	Plexiglas wall behind firing line in range	203 ug/ft ²
9	Plexiglas wall behind firing line in observation rm	BRL
10	Randomly selected table in OB room used to clean weapons	543 ug/ft ²
11	Floor 1 ft outside range	40 ug/ft ²
12	Top of dishwasher in kitchen	BRL
13	Top of refrigerator near kitchen entrance	BRL
14	Top of Coke machine drill hall	119 ug/ft ²
15	Center drill hall floor	BRL
16	Floor 1 ft in front of room 146	37 ug/ft ²
17	Return air grill, Conf. room wildlife (AHU 3)	BRL
18	Supply air grill, room 114, (AHU 7)	BRL
19	Return air grill, Orderly room (AHU 1)	48 ug/ft ²
20	Supply side air filter, AHU 1	30 ug/ft ²
21	Supply side air filter, AHU 2	45 ug/ft ²
22	Supply side air filter, AHU 3	36 ug/ft ²
Bulk #3	Sand from the pit	9910 mg/kg
Blank	Blank	BRL

*BRL indicates below reporting limits

SUBJECT: Industrial Hygiene Survey of Cullman National Guard Armory, Cullman, Alabama

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Non-Responsive

LAE Consulting

4 Encl

1. Building Diagram
 2. HHIM
 3. Facility Photos
 4. Laboratory Results
- CF: Alabama

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

Page 4

SUBJECT: Industrial Hygiene Survey of Cullman National Guard Armory, Cullman, Alabama

6. Recommendations.

a. Recommend contacting a structural engineer to determine the extent of damage and the stability of the building. Recommend the state facility engineers inspect and repair all areas that water has infiltrated. Contact the state Safety and Occupational Health office for assistance with mold and remediation measures. *Do not attempt to remove mold as a facility self-help project. Contact the state authorities for written permission and guidance on Mold remediation.*
(RAC 2)

b. Recommend cleaning the air ducts in the facility. In the interim, clean the supply and return air grills throughout the facility. Ensure filters are changed every 30 days. (RAC 2)

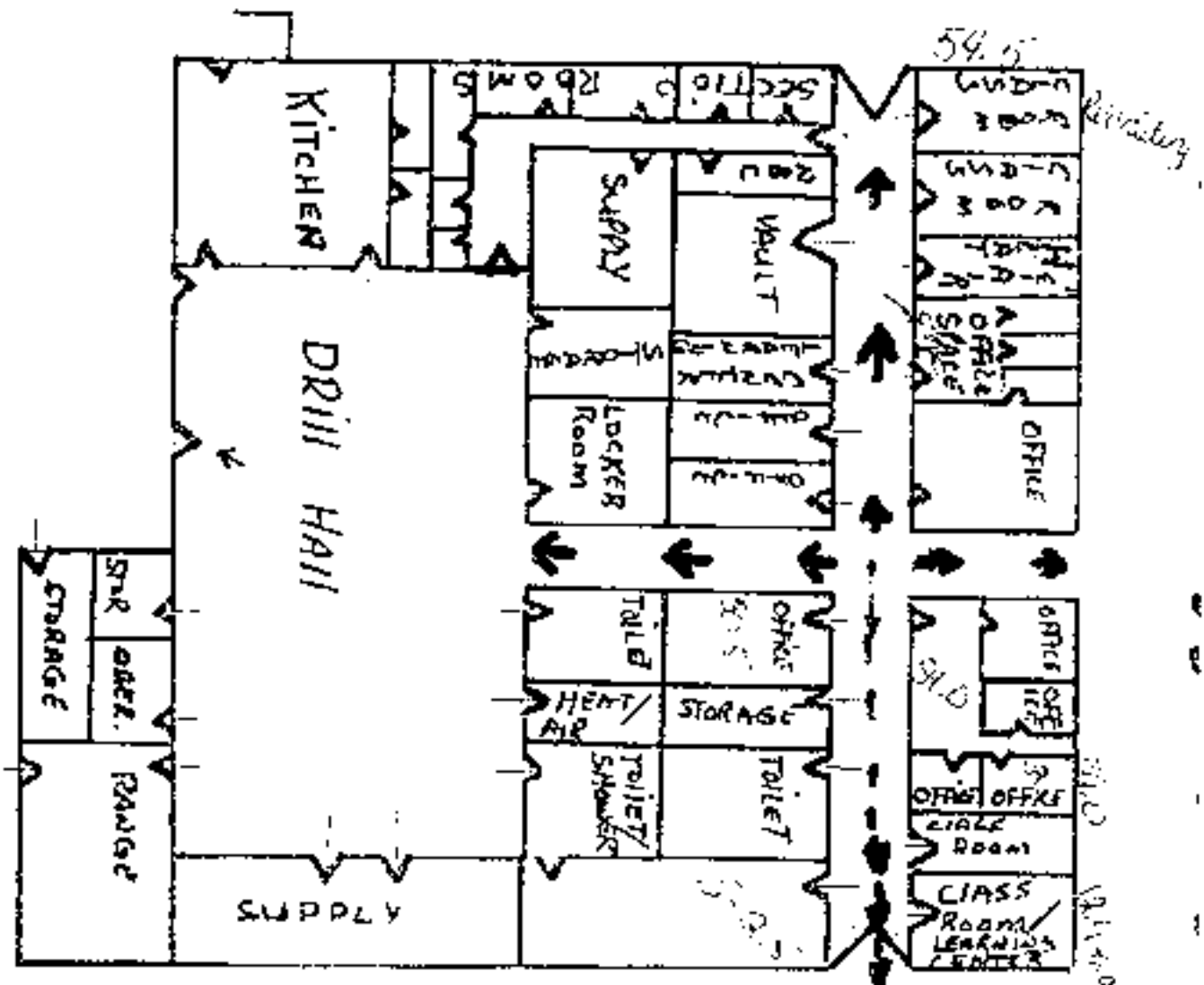
c. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If monies are available, recommend upgrading the lighting fixtures to meet the recommended requirements.
(RAC 3)

d. Recommend that facility personnel discontinue all activity in the range until guidance from the State's Safety, Occupational Health, Environmental and Engineering office is provided. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.
(RAC 2)

LAF Consulting
1218 S. Lakeside Drive, Suite 100, Mountain View, Maryland 21114
Telephone: (410) 361-2700

Page 3







ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 26, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717

FAX: (410) 551-7215

RE: CULLMAN ARMORY

Order No.: 0702B23

Dear Non-Responsive

Analytical Environmental Services, Inc. received 23 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.

-AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

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

Director of Project Management



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
 3785 Presidential Parkway, Atlanta GA 30340-3704
AFS TEL: (770) 457-8177 / TOLL-FREE: (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order 0202323
 Date 16 Feb 07 Page 1 of 2

COMPANY LAE Consulting ADDRESS 218 Scattered Run Ct FAX: 410.551.7215 PHONE: [REDACTED]		ANALYSIS REQUESTED Visit our website www.acsatlanta.com to check on the status of your results, place bottle orders, etc.		No # of Containers	
DATE 410.551.2717 [REDACTED]		PROJECT INFORMATION PROJECT NAME CULLMAN ARMORY PROJECT # CULLMAN, ALABAMA SEND REPORT TO LAB REPORTS + NO BUREAU IHS INVOICE TO NO BUREAU IHS COLLEGE PARK, GA		RECEIPT Total # of Containers	
SAMPLE ID [REDACTED]		SHIPMENT METHOD CLIENT FedEx UPS MAIL COURIER GREYHOUND OTHER USPS		TAT (Business Days) Standard 3 Business Days 2 Business Day Rush Next Business Day Rush Same Day Rush (with req.) Other	
DATE/TIME 16 Feb 07		DATE/TIME 2/21/07 12:40		STATE PROGRAM (if any) E-mail ON, FAX Y/N DATA PACKAGE 1 2 3 4	
DATE/TIME 16 Feb 07		DATE/TIME 2/21/07 12:40		QUOTE #	
DATE/TIME 16 Feb 07		DATE/TIME 2/21/07 12:40		INSTRUCTIONS/COMMENTS 2; Results in ug/l/r- [REDACTED]	
DATE/TIME 16 Feb 07		DATE/TIME 2/21/07 12:40		SAMPLES RECEIVED [REDACTED]	
DATE/TIME 16 Feb 07		DATE/TIME 2/21/07 12:40		SAMPLES ANALYZED [REDACTED]	

White Copy - Original; Yellow Copy - Client

Matrix Codes: A - Air, CW - Condensate, SE - Sediment, SO - Soil, SW - Surface Water, W - Water (Black), DW - Drinking Water (Black), O - Other (Specify)

Preservative: 1000-5, 10-1 = 1% ascorbic acid + ice, 1 - Ice only, 8 - Nitric acid, 9-1 = Sulfuric acid + ice, 9-2 = Chloroform (Specify)

MA - Note

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client: LAC Conts, Inc.Work Order Number 6-10-21543Checklist completed by MS [Signature]Date 2/2/11Carrier 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? Yes ☒ No ☐ 30.5 + 12.121Cooler #1 Amend 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 ☐Wax 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 ALHA ready is a known blank included? Yes ☐ No ☒ Yes 30.5, 12.121

See Case Narrative for resolution of the Non-Conformance

* Samples do not have to comply with the given range for certain parameters

C:\Documents and Settings\Chemist\Desktop\CHECKLIST.tif

Analytical Environmental Services, Inc.

Date: 26-Feb-07

CLIENT: LAE Consulting
Project: CULLMAN ARMORY
Lab Order: 0702B23

CASE NARRATIVE

The COC was not signed when it was relinquished.

The collection date was not listed on the sample containers. The collection date listed for the first sample on the COC was used as the collection date for all samples.

Samples should be analyzed for Lead per Non-Response on 2/22/07.

Analytical Environmental Services, Inc.

Date: 3/26/2007

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: LAE Consulting
 Project: CULLMAN ARMORY
 Delivery Order:
 PO No:

Lab Order: 0702B23
 Date Received: 3/23/2007 12:40 PM
 Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0702B23-001A	BLANK	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-002A	Pb1	1100	µg/l	40	2.16	2/16/2007	2/23/2007	JY
0702B23-003A	Pb2	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-004A	Pb3	5500	µg/l	197	9.85	2/16/2007	2/23/2007	JY
0702B23-005A	Pb4	785	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-006A	Pb5	37	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-007A	Pb6	296	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-008A	Pb7	105	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-009A	Pb8	203	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-010A	Pb9	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-011A	Pb10	543	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-012A	Pb11	43	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-013A	Pb12	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-014A	Pb13	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-015A	Pb14	119	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-016A	Pb15	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-017A	Pb16	37	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-018A	Pb17	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-019A	Pb18	BLK	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-020A	Pb19	15	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-021A	Pb20	30	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-022A	Pb21	45	µg/l	20	1	2/16/2007	2/23/2007	JY
0702B23-023A	Pb22	36	µg/l	20	1	2/16/2007	2/23/2007	JY

Qualifier: BRL = Not Detected at the Reporting Limit

DF: Definition Factor

Results are blank corrected where applicable

Page 1 of 1

Analytical Environmental Services, Inc.

Date: 26-Feb-07

CLIENT: LAF Consulting

Work Order: 0703R23

Project: CULLMAN ARMORY

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPE_MET_AA

Sample ID	MB-83100	SampleType	MBLKM	TestCode	WIPE_MET_A	Units	µg, Total	Prep Date	2/22/2007	RunNo	99746		
Client ID		Batch ID	83100	TestNo	N7082			Analysis Date	2/23/2007	SeqNo	2001170		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual

Sample ID MB-83118	SampleType MBLK	TestCode WIPE_MET_AA	Units µg, Total	Prep Date: 2/22/2007	RunNo 98779						
Client ID	Batch ID 83118	TestNo N7082		Analysis Date 2/23/2007	SeqNo 2001171						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Dust
Lead	BRL	20.0									

Sample ID LCS-83100	SampleType LCS	TestCode WIPE_MET_A	Units µg, Total	Prep Date 2/22/2007	RunNo 99746						
Client ID	Batch ID 83100	TestNo N7082		Analysis Date 2/23/2007	SeqNo 2001173						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	990.5	40.6	957	0	104	80	120	0	0	0	

Sample ID	LCS-83118	SampleType	LCS	TestCode	WIPE_MET_A	Units	µg, Total	Prep Date	2/23/2007	RunNo	99779		
Client ID		Batch ID	83118	TestNo	N7082			Analysis Date	2/23/2007	SeqNo	2001758		
Analyte		Result		PQL	SPK value	SPK Ref Val		%REC	LowLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		1032		41.6	957	0		108	80	120	0	0	

Sample ID	LCS0-83100	SampleType	LCS0	TestCode	WIPE_MET_A	Units	µg, Total	Prep Date:	2/22/2007	RunNo	99746		
Client ID		Batch ID	83100	TestNo.	N7082			Analysis Date:	2/23/2007	SeqNo	2001174		
Analyte		Result		PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead	1042	42.2	957	0	109	80	120	990.5	5.04	25			

Qualifiers: 0 Analyte detected in the associated Method Blank
 11 Holding limits for preparation or analysis exceeded
 R RSD outside accepted recovery limits

UKL Below Reporting Limit
 J Analyte detected below quantitation limits
 S Spike Recovery outside accepted recovery limits

L Value above quantitation range
 M Analyte not NALAC certified

ANALYTICAL QC SUMMARY REPORT

CLIENT: LAE Consulting
 Work Order: 0702823
 Project: CULLMAN ARMORY

TestCode: WIPE_MET_AA

Sample ID	LCSD-8316	SampleType	LCSD	TestCode	WIPE_MET_AA	Units	ug, Total	Prep Date	2/23/2007	RunNo	98779
Client ID		Batch ID	8316	TestNo	N7082			Analysis Date	2/23/2007	SeqNo	2001800
Analysis		Result	1004	PQL	41.8	SPK value	0.57	%REC	1005	LowLim	80
						SPK RelVal	0	HighLim	1032	RPD	2/3
Lead										RPDLim	25

Qualifiers:	H	Analyte detected at the associated Method Blank	NRL	Below Reporting Limit	S	Value above quantitation range
	II	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	N	Analyte not NTLAC certified
	K	RPD outside accepted recovery limits	A	Spike Recovery outside accepted recovery limits		

Analytical Environmental Services, Inc.

Date: 26-Feb-07

CLIENT: LAF Consulting
 Lab Order: 0702B60
 Project: Alabama
 Lab ID: 0702B60-003A

Client Sample ID: BULK CULLMAN Pb1
 Tag Number:
 Collection Date: 2/16/2007
 Matrix: SOIL

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
METALS, TOTAL		SW6010B		(SW3050B)			Analyst: BB
Lead	9910	52.6		mg/kg-dry	B3525	10	2/26/2007 11:57:46 AM
PERCENT MOISTURE		D2216					Analyst: CG
Percent Moisture	5.98	0		wt%		1	2/23/2007 1:20:00 PM

Qualifiers: * Value exceeds Maximum Concentration Level
 URL Below Reporting Limit
 11 Holding time for preparation or analysis exceeded
 N Analyte not NELAC certified
 Rpt Limit Reporting Limit

0 Analyte detected in the associated Method Blank
 1 Value above quantitation range
 2 Analyte detected below quantitation limits
 3 NELAC analyte certification pending
 5 Spike Recovery outside accepted recovery limits

Page 3 of 3



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 26, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717
FAX (410) 551-7215

RE: Alabama

Order No.: 0702B60

Dear Non-Responsive

Analytical Environmental Services, Inc. received 3 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.
- AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

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

Director of Project Management



ANA'ICAL ENVIRONMENTAL SERVICES, INC.

3785 Presidential Parkway, Atlanta GA 30340-3704

TEL: (770) 457-8177 / TOLL-FREE: (800) 972-4889 / FAX: (770) 457-8188

LAE Consulting

1210 SCATTERED PINES CT
SEVERN, MD 21144

PHONE 410.551.2717

FAX 410.551.7215

SAMPLER ID

SAMPLED

DATE

TIME

Grav

Composite

Matrix (See codes)

BULK GUNTERVILLE Pb 1
BULK ARAB Pb &
BULK GUNTERVILLE Pb 3

SO
SO
SO

X
X
X

15 Feb 07
15 Feb 07
16 Feb 07

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Requested Record #J-15-0085 (AL)

Released by National Guard Bureau

Page 222 of 759

ANALYSIS REQUESTED

Visit our website
www.aesatlanta.com
to check on the status of
your results, place bottle
orders, etc.

REMARKS

BULK
BULK
BULK

PROJECT INFORMATION

PROJECT NAME

GUNTERVILLE AR

PROJECT #

SITE ADDRESS

SEND REPORT TO LAE CONSULTING 1210 PINES BUREAU

INVOICE TO:

(IF DIFFERENT FROM ABOVE)

NG BUREAU - 143
COLLEGE PARK, GA

QUOTE #

PO#

SUBMIT METHOD

OUT / / VIA

IN / / VIA

CLIENT FedEx UPS MAIL COURIER

GROUND OTHER USPS

ADDITIONAL INSTRUCTIONS/COMMENTS

TURNAROUND TIME REQUEST
Standard 5 Business Days
2 Business Day Rush
Next Business Day Rush
Same Day Rush (with req.)
Other

STATE PROGRAM (if any)

E-mail ☐ N, Fax ☐ Y/N

DATA PACKAGE I II III IV

SAMPLES RECEIVED AFTER 3PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY. IF NO TAT IS MARKED ON COCs, ALL WILL PROCEED AS STANDARD TAT.

SAMPLES ARE DISPOSED OF 30 DAYS AFTER COMPLETION OF REPORT UNLESS OTHER ARRANGEMENTS ARE MADE.

MATRIX CODES: A - Air GIV - Groundwater SF - Sediment SO - Soil SIV - Surface Water W - Water (Blank) DW - Drinking Water (Blank) O - Other (specify)

PRESERVATIVE CODES: H+1 - Hydrochloric acid + ice I - Ice only N - Nitric acid S+1 - Sulfuric acid + ice S/M+1 - Sodium bisulfate/methanol + ice O+1 - Other (specify) NA - None

Whole Copy - Original, Yellow Copy - Client

CHAIN OF CUSTODY

Work Order: 102660

Date: 19 Feb 07

Page 1 of 1

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client LTE Consulting Work Order Number 07021360Checklist completed by M. J. French Date 2/21/07Carrier 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? ^{MJ 2/21/07} ~~(see 2)~~ Yes ☒ No ☐Cooler #1 Impex 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 ALPHA 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

C:\Documents and Settings\Chemist\Desktop\CHECKLIST.rtf

Date: 26-Feb-07

Analytical Environmental Services, Inc.

CLIENT: LAE Consulting
Project: Alabama
Lab Order: 0702B60

CASE NARRATIVE

The COC was not signed when it was relinquished.

A project name was not provided on the COC. Project Name "Alabama" will be used per Lisa Evans on 2/22/07.

Samples should be analyzed for Lead per [REDACTED] on 2/22/07.

Analytical Environmental Services, Inc.

Date: 20-Feb-07

ANALYTICAL QC SUMMARY REPORT

CLIENT: LAF Consulting

Work Order: 0702H60

Project: Alabama

TestCode: 6010B_S

Sample ID	MB-83025	Sample Type	MILK	TestCode	6010B_S	Units	mg/Kg	Prep Date	2/22/2007	RunNo	99742
Client ID	83025	Batch ID	83025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001051
Analysis	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Rel Val	%RPD	RPOL m1	Qual
Lead	RR	5.02	5.02	5	94	00	120	0			
Sample ID	LC5-83025	Sample Type	LC5	TestCode	6010B_S	Units	mg/Kg	Prep Date	2/22/2007	RunNo	99742
Client ID	83025	Batch ID	83025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001049
Analysis	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Rel Val	%RPD	RPOL m1	Qual
Lead	46.98	5.02	5.02	5	94	00	120	0			
Sample ID	0702B09-002AM5	Sample Type	M5	TestCode	6010B_S	Units	mg/Kg-dry	Prep Date	2/22/2007	RunNo	99742
Client ID	83025	Batch ID	83025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001055
Analysis	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Rel Val	%RPD	RPOL m1	Qual
Lead	57.42	5.40	5.395	10.32	87.2	75	125	0			
Sample ID	0702B09-002AM5	Sample Type	M5D	TestCode	6010B_S	Units	mg/Kg-dry	Prep Date	2/22/2007	RunNo	99742
Client ID	83025	Batch ID	83025	TestNo	SW6010B			Analysis Date	2/23/2007	SeqNo	2001062
Analysis	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Rel Val	%RPD	RPOL m1	Qual
Lead	57.42	5.41	5.41	10.32	87	75	125	57.42	0.0173		

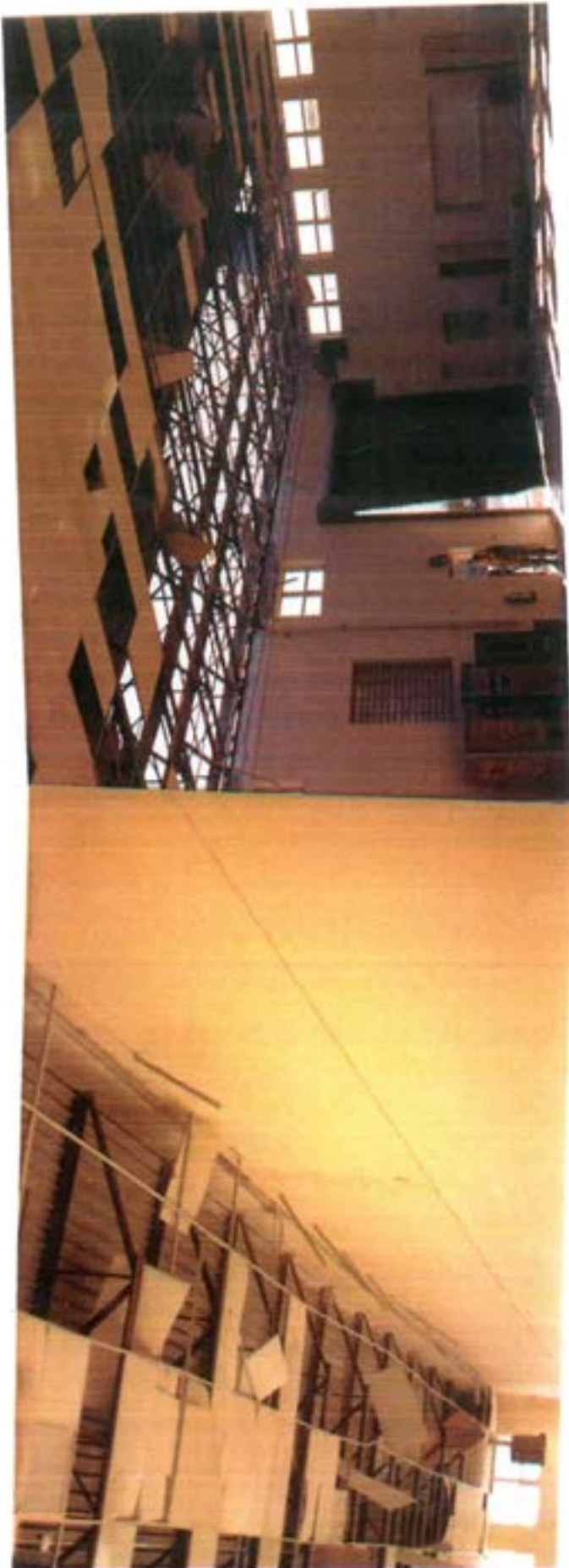
Qualifiers: B Analyte detected at the associated Method Minimum Holding time for concentration; analysis exceeded
 C Holding time for concentration; analysis exceeded
 R RPD outside accepted recovery limits
 HSL Below Reporting Limit
 I Analyte detected below quantitation limits
 S Spike Recovery outside Accepted recovery limits
 E Value above quantitation limit
 N Analyte not NPL certified

Page 1 of 1



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Cullman Armory, Cullman, Alabama



View of exterior damage on the brick of the Armory



Example of stained water tiles that are present throughout the facility



View of water stained walls that are present in several areas of the facility



View of wall damage which is evident on many walls of the Armory



View of extensive structural damage of the interior wall of the Armory



View above the drop ceiling of structural damage



View of the water damage and mold growth on the walls and ceilings within the deactivated indoor firing range



View of the water damage and mold growth on the ceilings within the deactivated indoor firing range



View of the water damage and mold growth on the walls and ceilings within the deactivated indoor firing range



View of the pit with sand present. View of Lead wipe samples 1, 2, and 3



Lead wipe sample 4, located on top of a steam table stored in the range



Lead wipe sample 5, located on the right acoustic tile wall of the range



Lead wipe sample 5, located at the center of the range floor



Lead wipe sample 5, located on the left acoustic tile wall of the range



Lead wipe sample 8, located on the window to the observation room on the range side



Lead wipe sample 9, on the wall within the observation room



Lead wipe sample 10, located on a randomly selected table used to clean weapons. Stored in the observation room



Lead wipe sample 11, located on the floor 1 ft outside the range entrance



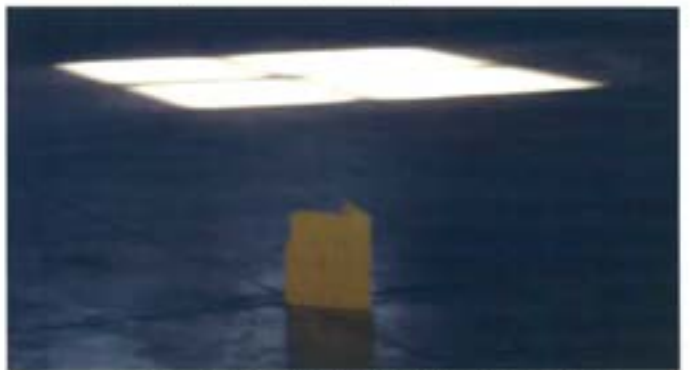
Lead wipe sample 12, located on top of the dishwasher in the kitchen



Lead wipe sample 13, located on top of the refrigerator near the kitchen entrance



Lead wipe sample 14, located on top of the Coke machine in the Drill Hall



Lead wipe sample 15, located at the center of the drill hall floor



Lead wipe sample 16, located 1 ft in front of room 146



Lead wipe sample 17, located on the return air grill in conference room of wild life office (AHU 3)



Lead wipe sample 18, located on the supply air grill in room 111 (AHU 2)



Lead wipe sample 19, located on the return air grill in room 128 (AHU 2)



Lead wipe sample 20, located on supply side of the air filter from AHU 1



Lead wipe sample 21, located on supply side of the air filter from AHU 2



Lead wipe sample 22, located on supply side of the air filter from AHU 3

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

ARLOC 01000	INSTALLATION CULLMAN ARMORY	BLDG/RM NO. 1000 23 RD STREET CULLMAN, ALABAMA 35055		
LOCATION/CODE AA		OPERATION/CODE ADO		
SURVEY DATE 15-16 FEB 07		EVALUATOR LAE CONSULTING		
MACOM/CODE NG		SUBMACOM/CODE XX	SUPERVISOR SFC [REDACTED]	
TELEPHONE/DSN NO. 256.775-3675	UNIT/ORGANIZATION CULLMAN ARMORY	RAC 2	FREQUENCY (hrs/day) +8 hrs	
NO. CIV(S)	NO. MIL	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER 2

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
LIGHTING	5-60.3	FC	50-100	UNACOMM

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

[illegible][illegible]

☐ No comments ☒ See attached sheet

See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

ARLOC 01000	INSTALLATION CULLMAN ARMORY	BLDG/RM NO. 1000 23 RD STREET CULLMAN, ALABAMA 35055		
LOCATION/CODE SA		OPERATION/CODE SAH		
SURVEY DATE 15 FEB 07		EVALUATOR LAE CONSULTING		
MACOM/CODE NG		SUBMACOM/CODE		SUPERVISOR SFC [REDACTED]
TELEPHONE/DSN NO. 256.586-4195	UNIT/ORGANIZATION CULLMAN ARMORY		RAC 2	FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER 2

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
HEATING		FC	50-100	UNACOMM

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

[illegible][illegible]

SECTION 6: COMMENTS

☐ No comments ☐ See attached sheet

u See attached sheet



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

NGB-ARS-SEIH

14 December 2006

MEMORANDUM THRU COL Charles Griffin, Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: Major [REDACTED] Supervisor, 660 Highway 84 west, Daleville, Alabama 36322.

SUBJECT: Industrial Hygiene Special of the Daleville Armory.

1. References.

- a. Report completed 5 December 2006, Industrial Hygiene report for Daleville Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC **Non-Responsive** of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Daleville Armory.

b. **Non-Responsive** of OSHEA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Discuss the high lead samples taken inside of the inactive indoor firing range, the kitchen and the assembly/drill hall area with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines for converting indoor firing ranges to other uses and NG REG 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges. (RAC 1)**

b. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

c. **Hazardous communication or HAZCOM refresher training.** Continue with annual HAZCOM training. Dated and signed records should be maintained of all HAZCOM training administered.

d. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin.
RAC 3, AR 40-5

e. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non- functioning light fixtures.

f. 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. RAC 3 AR 40-5

g. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

h. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ **Non-Responsive** Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC **Non-Responsive** Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

Alabama Army National Guard
Daleville Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: MAJ [REDACTED]
Armory Supervisor, Battalion Headquarters Company, Daleville, Alabama 36322

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of the Battalion Headquarters Company, Daleville, Alabama, 36322

November 24, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

Oshea II Industrial Hygiene Consulting
IH Survey Daleville Amory
Nov 2006

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at Battalion Headquarters Company, Daleville, Alabama.

3. **Background:** 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: Fort William Hornsby Armory, houses the Battalion Headquarters, 1/131 Armor, 781 Transportation Company, HHC 131 Armor, and Explosive Ordnance Division (E.O.D.). Fifteen full time individuals perform administrative duties. The armory was constructed in 1980 and is approximately 9,800 square feet. It contains several offices/ administrative areas, one combined kitchen/mess hall, supply rooms, weapons room/vault and an indoor firing range. The armory was well kept and there was no evidence of leaking. Ceiling and floor tile had no signs of friability.





The drill hall contained a tiled floor.





(hallway in the armory)



BEST AVAILABLE COPY
In the administrative office area of the armory phone answering, computer use and paper generation is performed.



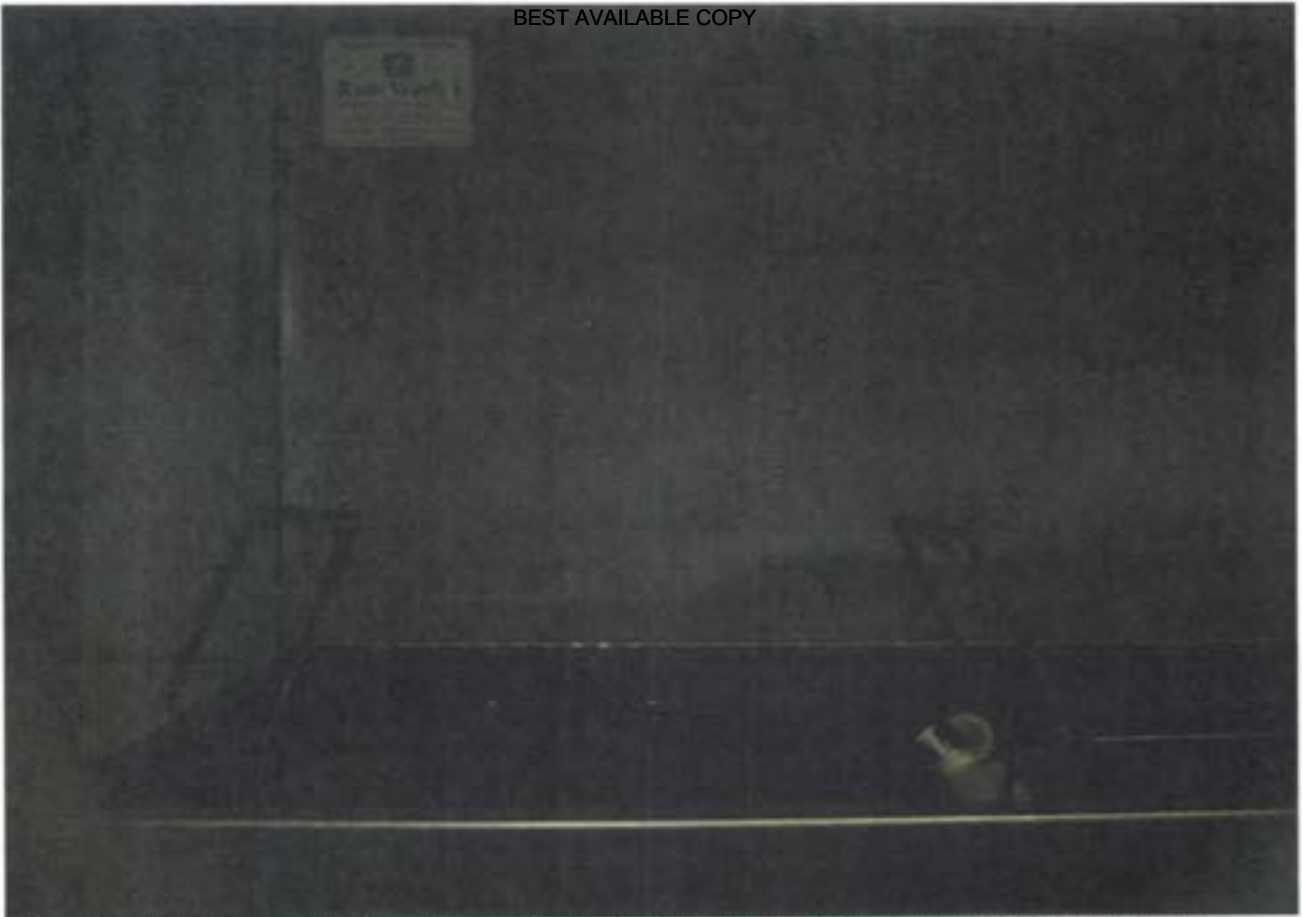
The kitchen was not used for food preparation.





Indoor firing range: It was stated that it had not been used in years. Wipe samples were obtained at the firing stations and the bullet stop. Results are addressed later in the report.





The solvent bath was located in a room next to the firing range. It was secured until needed. It was stated that it is used on drill weekends to clean weapons.



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 and evaluated for the armory's inventory.

c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	80.4---82.2	50---100
Class room	74.7-----76.3	50---100
Hallways	55.1-----55.3	50---100
Kitchen	50.8-----52.1	50---100
Admin areas	78.0-----78.8	50---100
Firing range	44.5-----44.7	5---10
Vault	24.6-----25.2	50---100
Supply	25.6-----26.8	50---100
Drill Hall	55.2-----57.3	50---100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

e. **Wipe sampling:** Wipe samples were obtained in the following areas : the bullet backstop of the firing range, dusty horizontal surfaces in the assembly/drill hall area and the kitchen . Twenty-seven wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. All twenty-seven samples indicated the presence of lead. Readings from top left to the bottom right were as indicated in the table below:

Lead Sample Results of Bullet Stop

297	131	821	267	186	2850	6920	7010	4640
8670	12000	6620	8040	11900	2260	10500	11200	5320
4500	8740	77	73	169	84	210	210	138

These results are in micrograms.

- e. **Motor Pool Area:** The motor pool area located behind the armory. Vehicles used to during drill. Armory's personnel perform no maintenance operations or vehicle repairs.
- f. A noise level survey was performed of the vehicles located 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:** Weapons are stored 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.
- i. **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 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office

ATTN: LTC Non-Responsive

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office

ATTN: Major Non-Responsive

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

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	1595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625

Enclosure No. 1

DD2214 - Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)							
1. DATE (YYMMDD) 2006 / 11 / 17				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</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 Extech		a. MANUFACTURER		a. MANUFACTURER Extech			
b. MODEL 407703	c. SERIAL NO. 041002810	b. MODEL	c. SERIAL NO.	b. MODEL 7703A	c. SERIAL NO. 4XX69		
d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>				7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>			
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Daleville Armory 660 US Hwy 84 west Daleville, AL 36322					9. PRIMARY SOURCE OF NOISE Trucks		
					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)
Hemmet	S		92.0			X	
5 Ton truck	S		90.5			X	
2.5 Ton truck	S		88.1			X	
HUMMWV	S		85.6			X	
10 kw Generator	S		90.2			X	
5 Kw Generator	S		88.7			X	
NOTES: Rang 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) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.							
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) All who work in this shop area							
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION							
a. NAME (Last, First, Middle Initial) MA. [REDACTED]		b. TELEPHONE (Include area code) 234-598-6265			c. ORGANIZATION Daleville Armory		
17. SURVEY PERFORMED BY (Last Name, First Name, MI) <div style="background-color: red; color: white; padding: 2px;">Non-Responsive</div>					18. HEARING CONSERVATION MONITOR (Last Name, First Name, MI)		

DD FORM 2214, JAN 2000

PREVIOUS EDITION MAY BE USED

Hazardous Material inventory

Enclosure No. 3

OIL HOUSE INVENTORY

ITEM	UNIT	O/H	REC	ISSUED	O/H
1 TURBO SHAFT	QTS	142			
2 FRH	5 GAL	1			
3 FRH	1 GAL	1			
4 FRH	QTS	282			
5 30WT	5 GAL	X0			
6 30WT	QTS	205 / 20			
7 10WT	5 GAL	2			
8 10WT	QTS	52			
9 15W40	5 GAL	12 /			
10 15W40	QTS	145			
11 80W20	5 GAL	X0			
12 GAA	5 GAL	X 1			
13 GAA	1 GAL	5			
14 GAA	TUBES	106 / 2			
15 AIRCRAFT GR 6.5PDS		X 9			
16 DEXTRON III	QTS	X 27			
17 BREAKFREE	1 GAL	2			
18 BREAKFREE	QTS	61			
19 BREAK FLUID	1 GAL	2			
20 SEALING CMR	1 GAL	4			
21 BLACK PAINT	QTS	21 0			

Laboratory Analysis

Enclosure No. 4

Analytical Environmental Services, Inc.

Date: 11/28/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: OSHEA II
Project: HARTFORD
Delivery Order:
PO No:

Lab Order: 0611B70
Date Received: 11/20/2006 2:25 PM
Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DP	Date Collected	Date Analyzed	Analyst
0611B70-001A	31101	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-002A	31102	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-003A	31103	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-004A	31104	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-005A	31105	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-006A	31106	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-007A	31107	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-008A	31108	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-009A	31109	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-010A	311010	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-011A	311011	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-012A	311012	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-013A	311013	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-014A	311014	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-015A	311015	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-016A	311016	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-017A	311017	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-018A	311018	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-019A	311019	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-020A	311020	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY
0611B70-021A	311021	NR	µg. Total	20	1	11-6-2006	11-27-2006	JY

Qualifiers: NR = Not Detected at the Reporting Limit

1X = Dilution Factor

Results are Blank corrected where applicable

Page 1 of 1

Full Time Personnel

A personnel list was requested but Major [REDACTED] refused to provide the information

Enclosure No. 5

BEST AVAILABLE COPY

HHJM

Enclosure No 6

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC 01000

INSTALLATION AARNG

BLDG _____

ROOM _____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
AA	ADO	YR 06/ 11/17	KJS	NG

MAJ [REDACTED]	Daleville Armory Battalion Headquarters				3
PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	# MIL	# CONTRACT # LOC
334-598-6265	x /	6-8 hours/ day	15	/	/
LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE	
0	1	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	POnoiseco	2	0	Noise, continuous
POFOOTHAZ	POstress	3	0	Mental / physical stress
POFLYPROJ	POLifting	3	0	Heavy lifting
POEYEHAAZ	P0eyehaza	2	A	Eye Hazards
POFLAMMHAZ				
POLIFTING				
POSHARPOBJE				
POELSHOCK				
COLUBEOIL				

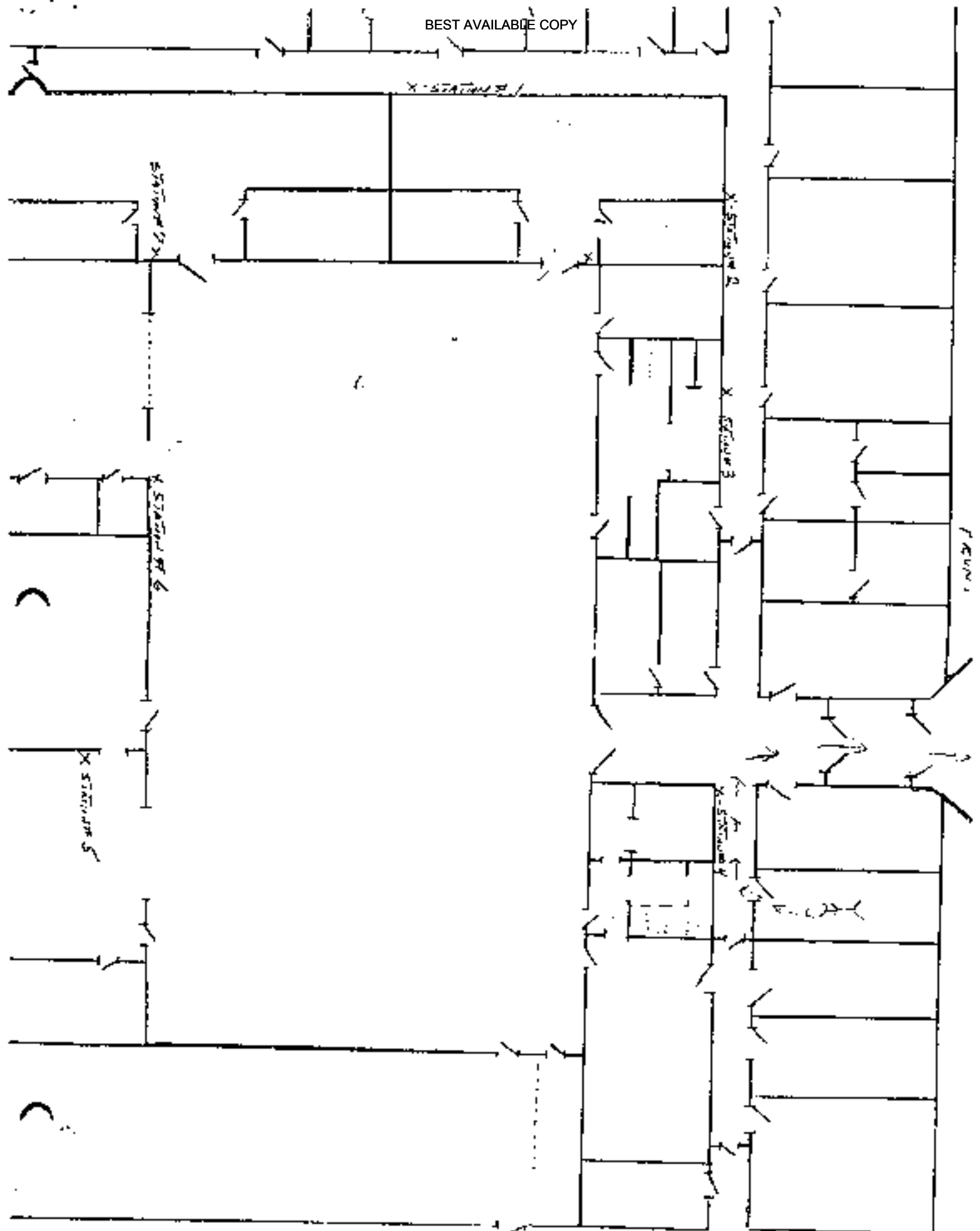
DESCRIBED OPERATION

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

PERSONNEL LIST ATTACHED

Facility layout

Enclosure No. 7



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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, HHC 1203rd Engineering BN, 186th Engineering Co (-), ATTN: MAJ [Non-Responsive] 1470 HHC, 1203rd BN, P.O. BOX 1470, Dothan, Alabama, 36302.

SUBJECT: Industrial Hygiene Survey of the Ft. Buntin Parsons National Guard Armory, Dothan, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.

- b. Mrs [Non-Responsive] of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.

b. Use the report to help in correcting all deficiencies noted by the contractor.

c. Discuss the high lead levels in the Indoor Firing Range (IFR) that has been converted to a storage room with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Remove the backstop and sand that is still in the converted storage room. Do not remove any stored items in the IFR until they have been tested for lead and properly cleaned.

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

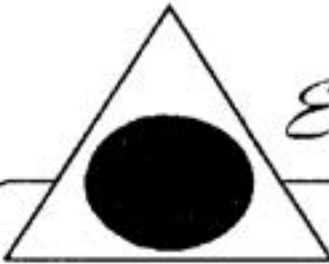
e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the contractors report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ **Non-Responsive** Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: HQ 1203rd Engineering BN, HHC 1203rd Engineering BN, 186th Engineering Co. (-) Attn: Commander, Ft. Buntin-Parsons National Guard Armory, P.O. Box 1470 HHC, 1203rd BN, Dothan, Alabama 36302.

SUBJECT: Industrial Hygiene Survey for the Ft. Buntin- Parsons National Guard Armory, Dothan, Alabama.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Buntin-Parsons National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Buntin-Parsons Armory. An interview was conducted with Major **Non-Responsive** to gather background and historical information relative to the various operations at the Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses Appendix E includes laboratory results and Appendix F is a listing of personnel in the Armory.

3. Background. At the request of Mr **Non-Responsive** of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Buntin-Parsons National Guard Armory in Dothan, Alabama on June 7, 2004 by **Non-Responsive** Industrial Hygienist.

SUBJECT: Industrial Hygiene Survey for the Ft. Buntin-Parsons National Guard Armory, Dothan, Alabama.

4. Facility Description. This facility houses HQ 1203rd EN BN, HHC 1203rd EN BN, and the 186th EN Co. (-). A total of fourteen full time employees work in the Ft. Buntin-Parsons Armory. The armory is utilized by supply and administrative personnel during the week (Monday through Friday) and it is utilized for Guard drill on the weekends. The physical structure is a one story red brick building with gray trim. The building was constructed in 1976. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Inactive Firing Range	HHC Orderly Room and other
HHC Supply Room/Vault	Admin offices
186th Supply Room/Vault	Mechanical Room
Class Rooms 1 & 2	Communication Room
Drill Hall	Weight Room
Kitchen	Recruiters Office
186th Orderly Room & other	Male & Female Latrines
Admin offices	

5. Health Hazard Inventory Module (HHIM) & Risk Assessment Codes - The results of the walk through survey were entered into a health hazard inventory module (HHIM) industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 6055.1 and are reproduced in Appendix C.

6. Findings.

- A. Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room - An initial walk through of the facility revealed that there was an inactive firing range located on the premises. A vehicle maintenance operation was not present and an inactive boiler room was not present.
- B. Suspect Asbestos Containing Materials
(1) There were no suspect asbestos containing materials identified in this facility. The floor tile was replaced approximately two years ago. The ceiling tiles were not suspect asbestos containing however, some tiles were water damaged due to the leaking roof.

SUBJECT: Industrial Hygiene Survey for the Ft. Buntin-Parsons National Guard Armory, Dothan, Alabama.

- C. Supply Room – There are two Supply rooms and Vaults located in this facility. The first supply operation is supported by the HHC battalion and the second supply operation is supported by the 186th battalion. The HHC supply sergeant is SSG [REDACTED] and 186th supply sergeant is SSG Meadows. The two supply operations are almost identical in function and design. The supply sergeants are responsible for ordering, distributing, and storing military supplies and equipment. The room is secured by lock and key. The ULLS and RCAS computer systems are used for this operation. Both supply sergeants utilize the computers an average of four to five hours per day. The employees had no ergonomic concerns or complaints. A flammable cabinet was not present in this operation.
- D. Vault – Both the HHC and the 186th Battalions have a security vault located within the supply room. The vault is used to store military weapons and some radioactive equipment such as chemical detectors. Weapons repair or maintenance is not performed in the vault. There is only one means of entry and egress and no independent ventilation is present in this operation. The vault was labeled for the radioactive hazard due to the low level source of radiation in the equipment.
- E. Illumination survey - An illumination survey was conducted in nine areas at this facility. The illumination levels in four of the areas surveyed were not within the American National Standards Institute (ANSI) recommended minimum illumination levels. It was observed that there were many fluorescent bulbs which were not functioning, missing, or flickering.

The illumination levels in the survey can be seen in table II.

Illumination TABLE II Survey

Location	Illumination Level (fc)	ANSI Minimum Requirements (fc)	DG 412-2 Minimum Requirements (fc)
CSM [REDACTED] Office	87-89	50 - 100	50
MSG [REDACTED]	75.5	50 - 100	50
Major [REDACTED] Office	78-90	50 - 100	50
SFC [REDACTED] Desk	40	50 - 100	50
SSG [REDACTED] Desk	86	50 - 100	50
SGT [REDACTED] Desk	53	50 - 100	50
SFC [REDACTED]	37-44	50 - 100	50
186 th BN supply room	19-39	50 - 100	50
186 th BN storage area	2-16	10	10

Notes: ANSI office illumination depending on the task is 50 fc for general desk work and 90 fc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft. Buntin-Parsons National Guard Armory, Dothan, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel for formation and for a Mess hall. The floor is composed of concrete and the ceiling is composed of a compressed seaweed type material (Tectum) that is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq.ft. guideline as required by NG PAM (AR) 385-16.
- G. Inactive Firing Range – The Ft. Buntin-Parsons Armory is equipped with an inactive indoor firing range which is now used for storage space. The bullet backstop and the sand pit are the only remaining materials. An interview revealed that the firing range has not been cleaned or decommissioned. Chairs and tables are stored inside the range. As required, lead wipe samples were collected from the inactive firing range. Laboratory results revealed that one of the samples taken from the firing range was found to be above 200 micrograms/sq. ft. guidelines as required by NG PAM(AR)385-16.
- H. Kitchen – The kitchen is adjacent to the armory floor and is fully functional. The kitchen is used during drill weekends. Housekeeping was adequate and there were no signs of insects or pests. An interview with personnel revealed that a dry chemical fire extinguisher above the stove is not functional and needs maintenance.

SUBJECT: Industrial Hygiene Survey for the Ft. Benlin-Parsons National Guard Armory, Dothan, Alabama.

Recommendations

1. Lighting should be upgraded in all areas that were indicated as deficient.
2. As required by NG PAM (AR) 385-16, the inactive firing range should be decontaminated and clearance testing should be performed to verify the effectiveness of the cleanup.
3. Perform maintenance or replace the fire extinguisher above the stove in the kitchen.

SUBJECT: Industrial Hygiene Survey for the Ft. Buntin-Parsons National Guard Armory, Dothan, Alabama.

Ft. Parsons National Guard Armory
Lead Wipe Sample Analysis
Appendix E

Sample No.	Location	Type Analysis	Micrograms Acubic ft ug/m ³
D-01	Drill Fl., Overhead door	Lead	BRL
D-02	Drill Fl. Center of Floor	Lead	BRL
D-03	Drill Fl., near kitchen storage	Lead	BRL
D-04	Kitchen, at entrance	Lead	BRL
D-05	Supply grill	Lead	BRL
D-06	Blank	Lead	BRL
D-07	IFR, Bullet backstop	Lead	77.0
D-08	IFR, In front of bullet backstop	Lead	157.0
D-09	IFR, Rear wall next to entrance/exit	Lead	BRL
D-10	Blank	Lead	BRL
D-11	IFR, stored items	Lead	218

* BRL - below the reporting level

Sample no.	Location	Type of analysis	Ug/sq. ft
D-12	Sand from pit	Lead	13,200
D-13	Sand from pit	Lead	11,500

APPENDIX A



A - Wood, paper, textiles, rubbish
B - Flammable liquids, gases, groups
C - Electrical

STA 1,2,3 Extinguisher - Use on type A, B, or C Fire
STA 6 Extinguisher - Use on type A, B, or C Fire
STA 4 & 5 Extinguisher - Use on type B or C Fire.

APPENDIX B



APPENDIX C

MEDDAC (IF I WEAR)
FORM 609-R
MAY 15

PAC EPC

CAS Code

PAC EPC

Hazard Description

Radiactive Source (tritium)

3	A	POHSECO	POHSECO	3	A
3	A	POFOOTIAZ	POFOOTIAZ	3	A
3	A	POEYELAZA	POEYELAZA	3	A
3	A	POFLAMIAZ	POFLAMIAZ	3	A
3	A	POLEFING	POLEFING	3	A
3	A	POSTARPOB	POSTARPOB	3	A
3	A	POHOTOBJE	POHOTOBJE	3	A
3	A	POELSIKCK	POELSIKCK	3	A
3	A	COLUBECIL	COLUBECIL	3	A

Social Security Number or

Other Unique Identifier

Last Name

First Name

MI

Sex

Category

BEST AVAILABLE COPY

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

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Comments

Remember to comment on problems, recommendations, and needed control items

1. Operation described is: SAT2. Other operations: MAN, LOA

3. Radiactive hazard signage is available on vault concerning the hazard.

Location **01C 60**
 Survey Date **04/05/07**
 Year Month Day **04 05 07**
 MACOM **WIC**

Building Number **FTBunH1W-Parsons**
 Sub-MACOM **XIX**
 RAC **B**

Room Number **186th**
 Unit/Organization **Supply Room & Vault**

Supervisor **334 7193 9508**
 Supervisor or Point of Contact telephone number **334 7193 9508**
 Lab Hoods ☒
 Vapor Degreasers ☒
 Spray Booths ☒
 Open Surface Tanks ☒
 Ventilation Units ☒

Frequency (hrs/day) ☐
 No. CIVs ☐
 No. MIL ☐
 Contractors ☒
 No. LOCs ☒

Controls present (if > 6, continue in comments) **25**
 Evaluation [25 char max per line]
 Unit Code **19-39 FTK**
20-16 FTK
 Controls Required [25 char max per line]
50-100
10

Manufacturer's Description (10 char max) **NIOSH TC# or foreign equiv. (10 char max)**

Gloves

Respirator
 acid
 cold surfaces
 hot surfaces
 NBC agents
 oil
 solvents
 surgical gloves
 leather/cotton
 other

Body
 aprons
 cold weather clothing
 coveralls
 full body suit
 heat reflective vest/suit
 safety belt/harness
 special purpose clothing
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Head and Feet
 cold weather boots/shoes
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other

Reminders: ergonomics - dermalitis - physical agents - flammable storage
 EYE (permanent) - EYE (portable) - SHW - GMV - LEV
 MEDDAC FORM 609-R
 1 MAY 90

Page 276 of 759

Hazard Description

Radioactive Source

Radioactive Source

Last Name

[illegible]

☐ Personnel data provided by the facility is attached to this form.

Remember to comment on problems, recommendations, and needed control items

7. Operation described is: SAT

2. Other operations: Mah, let.
3. Radioactive hazard signage is available on vault concerning the hazard.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (All)
Released by National Guard Bureau
Page 277 of 759

MEDDAC (PFT HEADLINE)
FORM 609-R
1 MAY 85

Hazard Description

[illegible]

Lisel Alarmon

[illegible]

☐ Personnel data provided by the faculty is attached to this form

Remember to comment on problems, recommendations, and needed control items

4. Operation described is: Redo

2. Other operations: off, m and

MEDDAC (P.T. MEADCO) **FORM 609-R**
1 MAY 95

[illegible]

Lauren Harris

Our Mission

2

5.2

Discography

Personnel at the Foreman by the facility is attached to this form

50-60-1007

Researcher by instrument on proliferation, reactor utilization, and waste and control limits

Figure 1 caption concludes is: OTH.

2. Other operations: LOA, MAN

3 - Vehicles are driven onto the floor and weapons are also removed on the floor.

4. Leaf samples were taken on the 11th floor and the results revealed,

MEDDAC (IF T MEALIE)
FORM 609-R
1 MAY 85

Key word data provided by the author is attached to this form

AVAILABLE COPY

	PAC	EPC	Illegal Description
Social Security Number of Other Unique Identifier			
Last Name			
First Name			
M Sex Category			

Remember to copy down all on problems, calculations and answers, and provide a helpful margin

Other operations: LCA , MAI

3. Butcher is fully functional and is used on weekends.

MEDDAC (FT HEADLINE) MAY 93
FORM 609-R

lead-disk +

MT	Sex	Category
----	-----	----------

BEST AVAILABLE COPY

Recommendation to comment on probabilities, not consequences, and needed cultural change

~~following~~: one sample circa 1900, 200 mg/kg on 15g fat.

APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2500
31 January 1994

NG PAM (AR) 385-10
ANGPAM 81-101

Safety

GUIDELINES FOR CONVERTING INDOOR FIRING RANGES TO OTHER USES

Summary. This is a new pamphlet. The guidance prescribes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. This guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulation/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVN-S).

Impact on New Manning System. This guidance does not contain information that affects the New Manning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested Improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau Attn: NGB-AVN-S, 111 South George Mason Drive, Arlington, VA 22204-1382.

Distribution. Distribution of this publication is made in accordance with the requirements on DA Form 12-09E.

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Range Cleaning Instructions	9
Cleaning Stored Contaminated Equipment	10
Contaminated Sand and Lead Waste	11
Medical Surveillance	12
Visitor Education	13
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B. Interpretation of Sample Results (Prior to Cleaning)	
C. Interpretation of Sample Results (After Cleaning)	
D. OSHA Instruction CPL 2-2.20B	
E. Where to Purchase Sample Media and Containers	
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H. Examples of Computation of Lead Level from Wipe Sample Results	
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Glossary

1. Purpose

This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.

2. References

Related publications are listed below.

a. DODI 6035.1 (Department of Defense Occupational Safety and Health (OSH) Program).

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

c. AR 40-3 (Preventive Medicine).

d. NGR (AR) 385-15 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).

e. T8 AED 602 (Occupational and Environmental Health Respiratory Protection Program).

f. USAEHA T8 101 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).

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

21 January 1994

HQ Pat (AR) 385-15-44GPAM 91-101

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

B-1 200 micrograms/sq ft or LESS

If all sample results are 200 micrograms/sq ft or less, the range can be converted and/or used for any purpose.

B-2 BETWEEN 201 and 200,000 micrograms/sq ft

Range must be unobstructed. Consult with cleaning instructions listed in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

B-3 OVER 200,000 micrograms/sq ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/sq ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/sq ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/sq ft limit.

B-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substratum. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE, that if your original wet sample results were, e.g., 125,000 ug/sq ft then you would have to reduce the lead level below 13,125 ug/sq ft. This would meet the 75 percent reduction criteria, however, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will allow the latex paint to adhere to the substratum. If the paint peels, falls to the floor and is crushed over a period of time, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the converted range for signs of peeling paint. Paint chips can be analyzed for lead content. **DO NOT IGNORE PEELING PAINT IN A CONVERTED INDOOR FIRING RANGE.**

APPENDIX C INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

C-1 200 micrograms/sq ft or LESS

If all sample results are less than 200 micrograms/sq ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substratum.

C-2 ABOVE 200 micrograms/sq ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/sq ft level. If all sample results meet this criteria, a contrasting color of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of kitchen equipment and food is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

APPENDIX E

Analytical Environmental Services, Inc.

Date: 3/20/2004

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region-South IH
 Project: Lead Aerosols
 Delivery Order:
 PO No:

Lab Order: 0407411
 Date Received: 3/12/2004 10:25
 Matrix: Wipe

Laboratory ID	Client Sample ID	Result	Units	Report Limit	DT	Date Collected	Date Analyzed	Analyst
0407411-013A	Detman D-01	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-014A	Detman D-02	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-015A	Detman D-03	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-016A	Detman D-04	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-017A	Detman D-05	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-018A	Detman D-06	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-019A	Detman D-07	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-020A	Detman D-08	BRL	µg/ft²	30.0	1	6/30/2004	7/14/2004	EM
0407411-021A	Detman D-09	BRL	µg Total	30.0	1	6/30/2004	7/14/2004	EM
0407411-022A	Detman D-10	BRL	µg Total	30.0	1	6/30/2004	7/14/2004	EM
0407411-023A	Detman D-11	BRL	µg Total	30.0	1	6/30/2004	7/14/2004	EM

Qualifiers: N/A - No Qualifiers in the Reporting Range

E1 - Release Permit

Analytical Environmental Services, Inc.

Date: 30-Jun-06

CLIENT:	National Guard Bureau Region-South 01	U-Test Sample ID:	Jordan DO-12
Lab Order:	6407411	Tag Number:	
Project:	Lead Analysis	Collection Date:	6/30/2004
Lab ID:	6407411-190A	Matrix:	SOIL

Analyses	Result	Limit Qual Units	BatchID	DF	Date Analyzed
METALS TOTAL		5000000	(6407411)		Analyst: CDW
Lead	1300	33.9	47451	10	7/14/2004 12:43:00 PM

Qualifiers	* Value exceeds Maximum Contaminant Level	D	Analyte dropped in the associated Method Blank
BL	Below Reporting Limit	E	Value above quantitation range
N	Nothing done for preparation as analyte not detected	-	Analyte detected below quantitation limit
N	Analyte not NELAC certified	P	NELAC analyte certification pending
Rep Limit	Reporting Limit	S	Spiking Recovery outside accepted range

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT:	National Guard Bureau Region-South IH	Client Sample ID:	Detran D-3
Lab Order:	0407411	Tag Number:	
Project:	Lead Analysis	Collection Date:	6/30/2004
Lab ID:	04074114061A	Matrix:	SOIL

Analyses	Result	Limit Quant Limit	Batch ID	DF	Date Analyzed
METALS, TOTAL		64495108	[64495108]		Analyst: COW
Lead	71600	46.0	47811	10	7/14/2004 12:57:00 PM

Qualifiers:	A	Value exceeds Maximum Contaminant Level	B	Analyte detected in the unadjusted Method Blank
	BR	Below Reporting Limit	C	Value above quantitation range
	H	Holding time for preparation of sample exceeded	D	Analyte detected below quantitation limit
	N	Analyte not NEUAC certified	E	NEUAC analyte purification pending
Report to: Reporting Limit			F	Splice Reentry results accepted on overyields

APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Buntin-Parsons National Guard Armory, Dothan, Alabama.

Fort Buntin-Parson Armory
Employee List

1	Non-Responsive	MAJ
2		
3		G
4		SG
5		C
6		SFC
7		FC
8		SG
9		SSG
1		G



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

NGB-ARS-SEIH

14 December 2006

MEMORANDUM THRU COL **Non-Responsive** Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SSG **Non-Responsive** Readiness NCO, 348 Larkin Road, Elba, Alabama 36323.

SUBJECT: Industrial Hygiene Special of the Elba Armory.

1. References.

- a. Report completed 5 December 2006, Industrial Hygiene report for Elba Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC **Non-Responsive** of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Elba Armory.

b. **Non-Responsive** of OSHEA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

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. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin. RAC 3, AR 40-5

d. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non- functioning light fixtures.

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. RAC 3 AR 40-5

f. **Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.**

g. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ. **Non-Responsive** Alabama State Safety and
Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC. **Non-Responsive** Alabama State Safety and
Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

Alabama Army National Guard
Elba Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: SSG [REDACTED]
Armory Supervisor, 1/131 Armor Company, Elba, Alabama 36326

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of 1/131 Armor Company, 348 Larkin Road, Elba, Alabama 36326

November 24, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

Oshes II Industrial Hygiene Consulting
IH Survey Elba Armory
Nov 2006

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at 1/131 Armor Company, Clayton, Alabama.

3. **Background:** 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

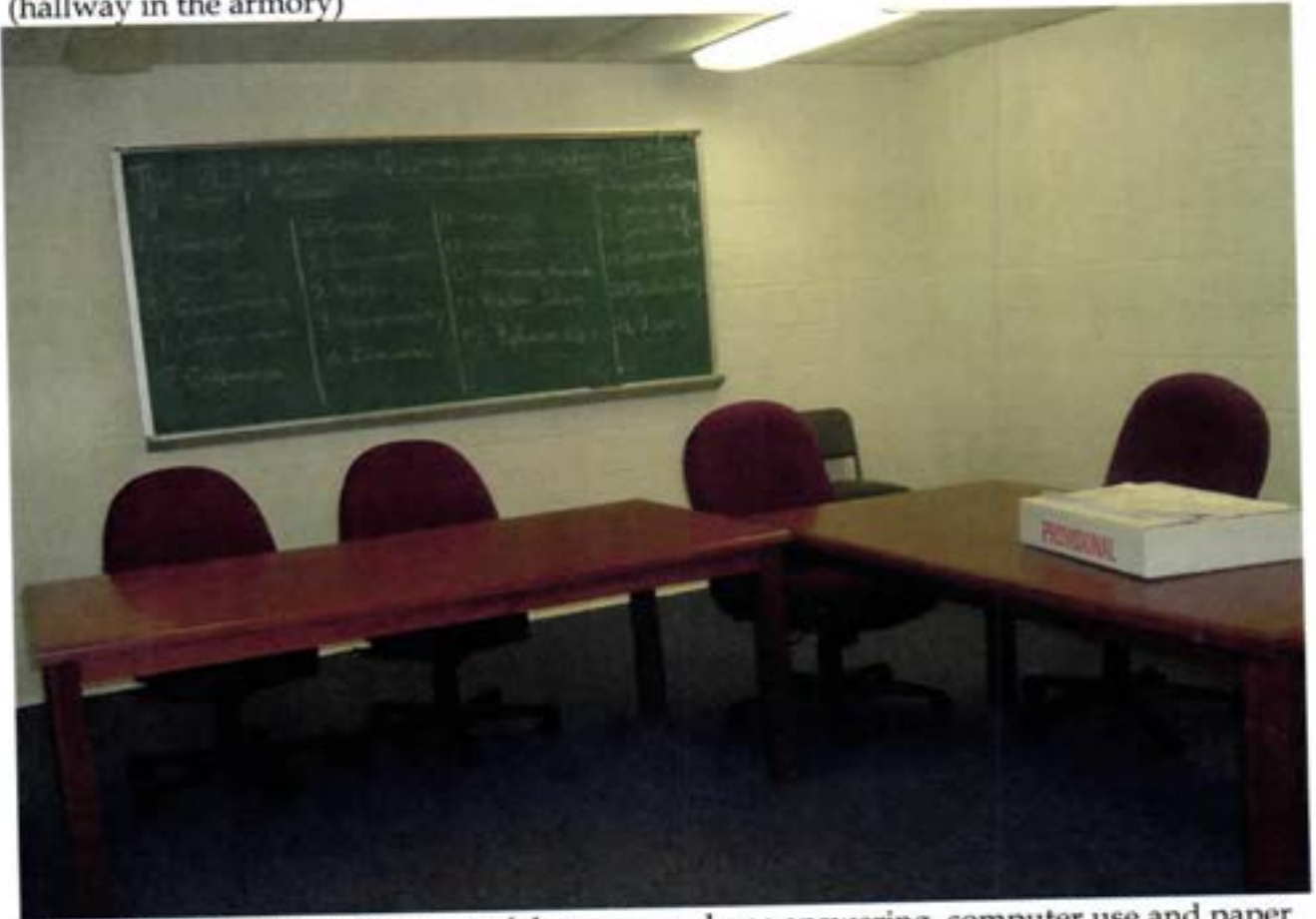
Armory Site Description: 1/131 Armour Company is housed in Fort Charles Rowe Armory. One full time individuals perform administrative duties. The armory was constructed in 1975 and is approximately 9,200 square feet. It contains several offices/five administrative areas, one combined kitchen/mess hall, supply rooms, weapons room/vault and an indoor firing range. The armory was well kept and there was no evidence of leaking. Ceiling and floor tile was intact with no visible signs of friability. The armory had recently been painted and a new roof one year prior to this site visit. Inside the range were two twenty-five gallon drums of mineral spirits. SSG **Non-Responsive** was preparing to have the drums removed from the premises.



The drill hall floor is tiled floor.



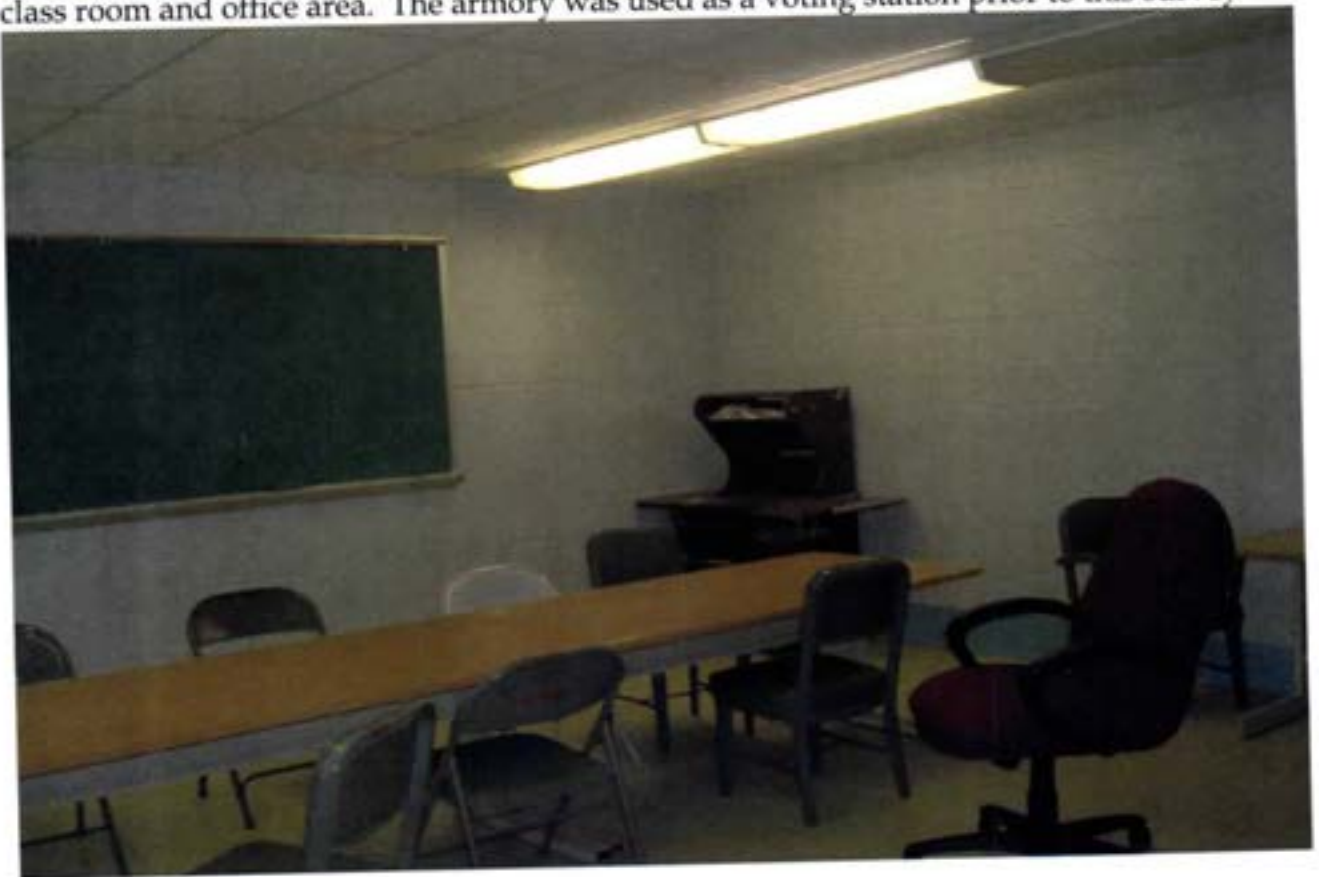
(hallway in the armory)



In the administrative office area of the armory phone answering, computer use and paper generation is performed.



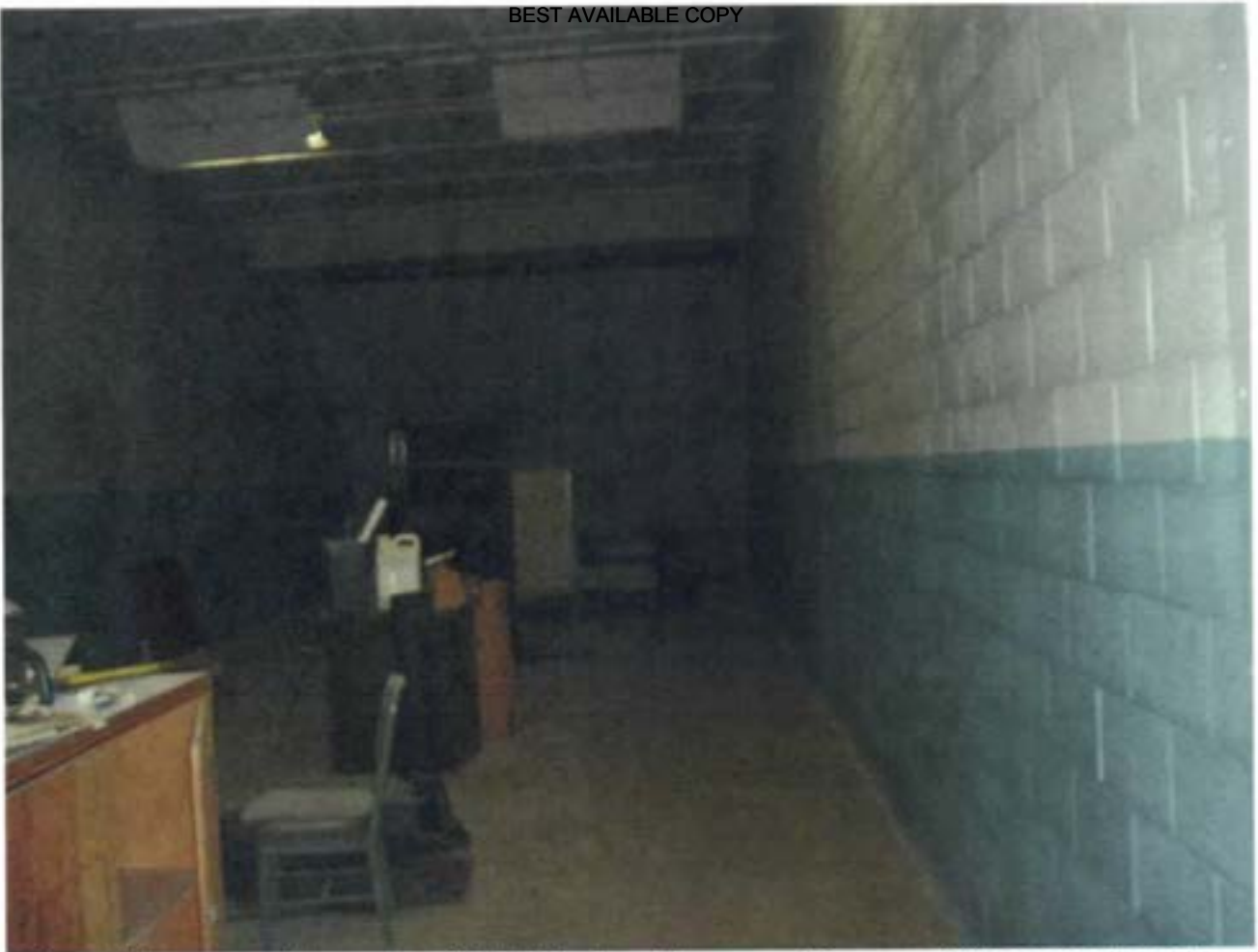
class room and office area. The armory was used as a voting station prior to this survey





The kitchen is not used to prepare food.





Indoor firing range: It was stated that it had not been used in years. Wipe samples were obtained of the bullet stop. The results will be addressed later in the report.





- 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 and evaluated for the armory's inventory.
- c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	75.1-----77.4	50----100
Class room	62.2-----75.1	50----100
Class room 2	59.2-----61.6	50----100
Kitchen	47.8-----52.2	50----100
Admin areas	59.7-----68.5	50----100
Firing range	30.5-----31.9	5-----10
Vault	25.1-----28.9	50----100
Supply	15.1-----18.4	50----100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

e. Wipe sampling: Wipe samples were obtained from the following areas: the bullet backstop of the firing range, dusty horizontal surfaces in the assembly / drill hall area and the kitchen. Twenty wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. Sample results were below reading limits (BRL) in the kitchen and the drill hall. Two samples obtained in the firing range indicated the presence of lead on the bullet stop. These two samples were taken in the center of the bullet stop

Lead Sample Results of Bullet Stop

29 micrograms	49 micrograms
---------------	---------------

f. Motor Pool Area: The motor pool area located behind the armory. Vehicles used to during drill. Armory's personnel perform no maintenance operations or vehicle repairs.

c. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

f. **Arms Room/Weapons Vault:** Weapons are stored 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.

i. **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 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office

ATTN: LTC **Non-Responsive**

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office

ATTN: Major **Non-Responsive**

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

Oshes II Industrial Hygiene Consulting
IH Survey Clayton Amory
November 2006

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

Enclosure No. 1

DD2214 -Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)							
1. DATE (YYYYMMDD) 2006 / 11 / 16				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</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 Extech		a. MANUFACTURER		a. MANUFACTURER Extech			
b. MODEL 407703	c. SERIAL NO. 041002810	b. MODEL	c. SERIAL NO.	b. MODEL 7703A	c. SERIAL NO. 4XX69		
d. LAST ELECTROACOUSTIC CALIB DATE YR/ M/D 06/03/06		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>				7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>			
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Elba Armory 348 Larkin Road Elba, AL 36325					9. PRIMARY SOURCE OF NOISE Trucks		
					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 (95-108)	c. PLUG AND MUFF (108-118)
5 Ton truck	S		87.2			X	
HUMMWV	S		87.5			X	
NOTES: Range of levels noted by F, 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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.							
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) All who work in this shop area.							
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION							
a. NAME (Last, First, Middle Initial) SSG Non-Responsive				b. TELEPHONE (include area code) 334-897-2914		c. ORGANIZATION Elba 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

Enclosure No.3

Inventory

OIL SAE

Dextron transmission fluid

Brake Fluid

Grease

Penetrating Oil

Antifreeze

Gear Oil

Laboratory Analysis

Enclosure No. 4

Analytical Environmental Services, Inc.

Date: 11/28/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: OSHLEA II
Project: ELBA
Delivery Orders:
PO No:

Lab Order: 0611B71
Date Received: 11/20/2006 2:25 PM
Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0611B71-001A	51101	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-002A	51102	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-003A	51103	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-004A	51104	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-005A	51105	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-006A	51106	29	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-007A	51107	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-008A	51108	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-009A	51109	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-010A	511010	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-011A	511011	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-012A	511012	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-013A	511013	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-014A	511014	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-015A	511015	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-016A	511016	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-017A	511017	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-018A	511018	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-019A	511019	45	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B71-020A	511020	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY

Qualifiers:

BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

Results are blank corrected where applicable

Page 1 of 1

Full Time Personnel

SSG **Non-Responsive**

Enclosure No. 5

BEST AVAILABLE COPY

HRIM

Enclosure No.6

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC_01000

INSTALLATION_AARNG

BLDG_____

ROOM_____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
AA	ADO	YR 06/ 11/16	KJS	NG
SUPERVISOR		ORGANIZATION		
SSG		Elba armory 1/131 Armour co..		
PH NO.		COMMERICAL/DSN	FREQUENCY	# CIV #MIL #CONTRACT # LOC
334-697-2914		x /	6-8 hours/ day	1 /
LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	1	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE	REQUIRED	UTILIZED		EYES/FACE	R U
GLOVES	R U	RESPIRATOR	R U	CHEM/SPLASH	R U
ACID	___	AIRLINE	___	FULL FACE SHIELD	___
COLD SURFACE	___	ABRASIVE BLASTING HOOD	___	CHEM/SAF IMPACT	x/x
HOT SURFACE	___	DISPOSABLE	___	SAFETY IMPACT	___
NBC AGENTS	___	FULL FACE AIR PURIFYING	___	WELDING HELMET	___
OIL	___	1/2 FACE AIR PURIFYING	___	WELDING GOGGLES	___
SOLVENTS	___	POWERED AIR PURIFYING	___	LASER EYE PROTECT	___
SURGICAL GLOVES	___	1/4 FACE AIR PURIFYING	___	OTHER	___
OTHER	___	SCBA	___		

HEAD AND FEET	R U	HEAD AND FEET	R U
HEAD AND FEET	R U	HEAD AND FEET	R U
COLD WEATHER BT&HAT	___	COLD WEATHER BT&HAT	___
HARD HAT	___	HARD HAT	___
IMPERMEABLE BOOTS	___	IMPERMEABLE BOOTS	___
SAFETY SHOE CONDUCT	___	SAFETY SHOE CONDUCT	___
SAFETY NON CONDUCT	x/x	SAFETY NON CONDUCT	x/x
OTHER	___	OTHER	___

	CAS CODE	PAC	EPC	HAZARD DESCRIPTION
P0NOISECO	P0noiseco	2	0	Noise, continuous
P0FOOTHAZ	P0stress	3	0	Mental / physical stress
P0FLYPROJ	P0lifting	3	0	Heavy lifting
P0EYHAZA	P0eyehaza	2	A	Eye Hazards
P0FLAMMHAZ				
P0LIFTING				
P0SHARPOBJE				
P0ELSHOCK				
C0LUBE0IL				

DESCRIBED OPERATION

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

PERSONNEL LIST ATTACHED

Facility layout

Enclosure No. 7

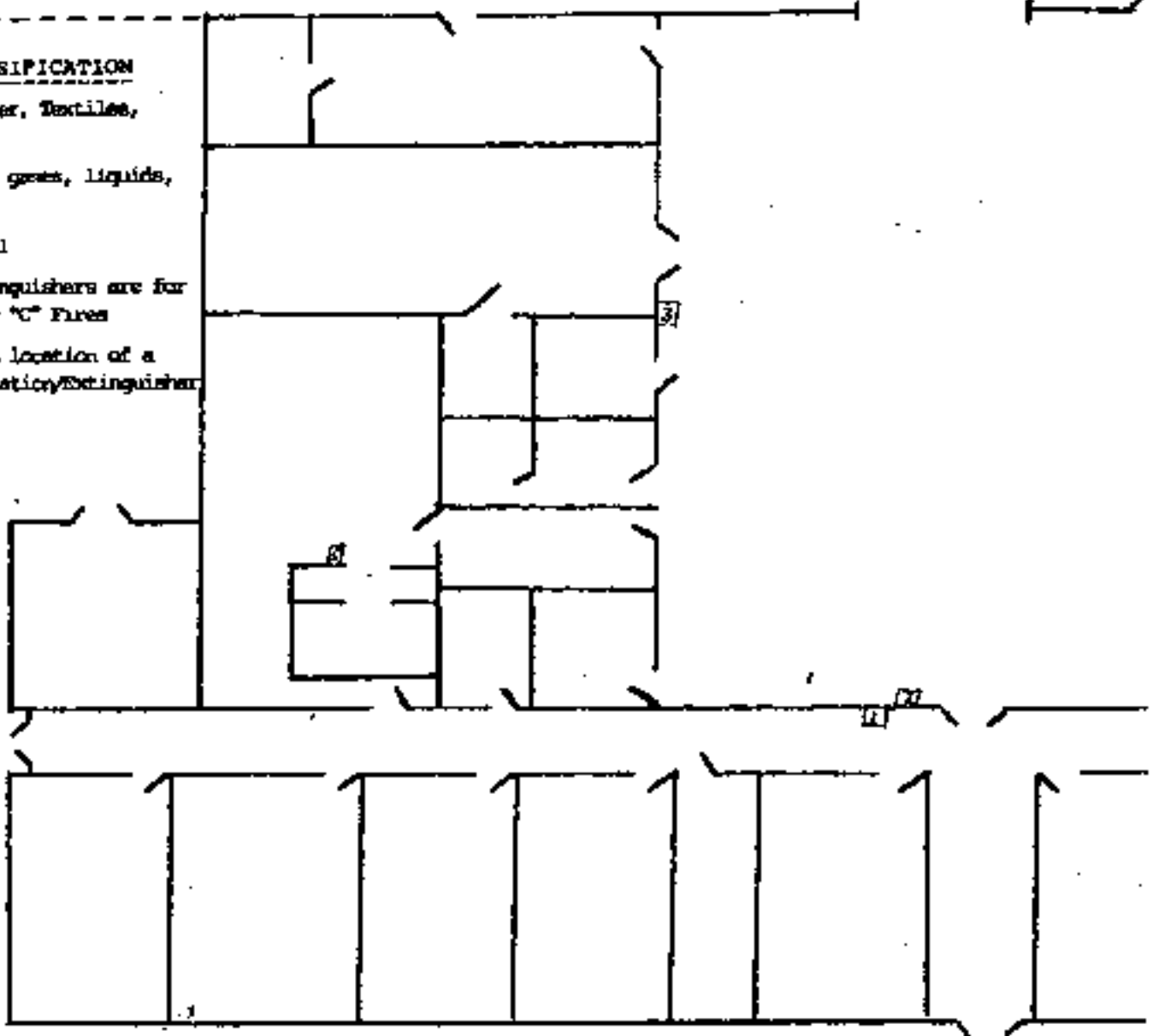
Oil House

FIRE ESCAPE
PLANFIRE CLASSIFICATIONA - Wood, Paper, Textiles,
Rubbish.B - Flammable gases, liquids,
grease.

C - Electrical

All fire extinguishers are for
use on "B" or "C" Fires☐ - Denotes location of a
Fire Station/Extinguisher

SOUTH



ASSEMBLY AREA ACROSS HIGHWAY

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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, HHD 31st FSB and Company B 31st FSB, ATTN: SFC **Non-Responsive** 1881 Guardian Way, Enterprise, Alabama, 36330.

SUBJECT: Industrial Hygiene Survey of the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.

- b. Mrs. **Non-Responsive** of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.

b. Use the report to help in correcting all deficiencies noted by the contractor.

c. Discuss the high lead levels in the Indoor Firing Range (IFR) that has been converted to a storage room with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Remove the backstop and sand that is still in the converted storage room.

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

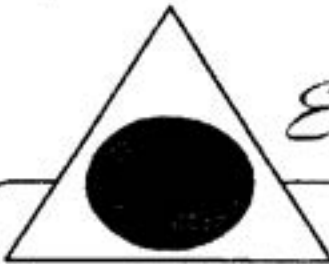
e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the contractors report, please contact [REDACTED] Non-Responsive Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ [REDACTED] Non-Responsive Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: HHD 31st FSB and Company B 31st FSB. Attn: Commander, Ft. Julius W. Hicks National Guard Armory, 1881 Guardian Way, Enterprise, Alabama 36330.

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Julius W. Hicks National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Julius W. Hicks Armory. An interview was conducted with SFC [Redacted] to gather background and historical information relative to the various operations at the Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses. Appendix E includes laboratory results and F includes a list of all personnel working in the Armory.

3. Background. At the request of Mr. [Redacted] of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Julius W. Hicks National Guard Armory in Enterprise, Alabama on June 8, 2004 by [Redacted] Industrial Hygienist.

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

4. **Facility Description.** This facility houses the HHD 31st FSB and Company B 31st FSB. A total of eleven full time employees work in the FL Julius B. Hicks Armory. The armory is utilized by supply and administrative personnel during the week (Monday through Friday) and it is utilized for Guard drill on the weekends. The physical structure is a one story brown brick building with dark brown trim and is divided into two wings. The building was constructed in 1977. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Inactive Firing Range	CO. B Admin offices
HHD Supply Room/Vault	Recruiting NCO office
CO. B Supply Room/Vault	Retention NCO office
Class Rooms 1 & 2	BN HQS
Drill Hall	Male & Female Latrines
Kitchen	
Dining facility	
HHD Admin offices	

5. **Health Hazard Inventory Module (HHIM) & Risk Assessment Codes** - The results of the walk through survey were entered into a health hazard inventory module (HHIM) industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 6055.1 and are reproduced in Appendix C.
6. **Findings.**
- A. **Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room** - An initial walk through of the facility revealed that there was an inactive firing range located on the premises. A vehicle maintenance operation was not present and an inactive boiler room was not present.
- B. **Suspect Asbestos Containing Materials**
(1) There were no damaged suspect asbestos containing materials identified in this facility. The ceiling tiles are not suspect asbestos containing however, some tiles are water damaged due to the leaking roof.

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

- C. Supply Room – There are two Supply rooms and Vaults located in this facility. The first supply operation is supported by HHD 31st FSB and the second supply operation is supported by CO. B 31st FSB. The HHD supply sergeant is SSG [REDACTED] and the Company B supply sergeant is SGT [REDACTED] Non-Responsive. The two supply operations are almost identical in function and design. The supply sergeant is responsible for ordering, distributing, and storing military supplies and equipment. The room is secured by lock and key. The ULLS and RCAS computer systems are used in each operation. Both supply sergeants utilize the computers an average of four to five hours per day. The employees had no ergonomic concerns or complaints. Radioactive equipment such as chemical detectors are stored inside cabinets under lock and key in the supply room. Signage is needed in this operation to warn employees of the radiation hazard.
- D. Vault – Both the HHD 31st FSB and Company B have security vaults located within the supply room. The vault is used to stored military weapons. Weapons repair or maintenance is not performed in the vault. There is only one means of entry and egress and no independent ventilation is present in this operation.
- E. Illumination survey - An illumination survey was conducted in seven areas at this facility. The illumination levels in four of the areas surveyed were not within the American National Standards Institute (ANSI) recommended minimum illumination levels. It was observed that there were missing or non functioning lights in the HHD supply office area.

The illumination levels in the survey can be seen in table II.

TABLE II
Illumination Survey

Location	Illumination Level (ftc)	ANSI Minimum Requirements (ftc)	DG 412-2 Minimum Requirements (ftc)
HHD Sgt [REDACTED] ofc	25	50 - 100	50
HHD storage	18-35	50 - 100	50
CO B supply ofc	25.4	50 - 100	50
CO B supply storage	16-32	50 - 100	50
SGT [REDACTED] Non-Responsive	63.0	50 - 100	50
SFC [REDACTED]	46.0	50 - 100	50
SPC [REDACTED]	53.0	50 - 100	50

Notes: ANSI office illumination depending on the task is 50 ftc for general desk work and 90 ftc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel for formation. The floor is composed of concrete and the ceiling is composed of a compressed seaweed type material (Fectum) that is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq.ft. guideline as required by NG PAM (AR) 385-18.
- G. Inactive Firing Range – The FL Hicks Armory is equipped with an inactive indoor firing range that is now used for storage space. The bullet backstop and the sand pit are the only remaining materials. An interview revealed that the firing range has not been cleaned or decommissioned. As required, lead wipe samples were collected from the inactive firing range. Laboratory results revealed that one of the samples taken from the firing range were found to be above 200 micrograms/sq. ft. guidelines as required by NG PAM(AR)385-18.
- H. Kitchen – The kitchen is adjacent to the armory floor and is fully functional. The kitchen is used during drill weekends. Housekeeping was adequate and there were no signs of insects or pests.

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

Recommendations

1. Lighting should be upgraded in all areas that were indicated as deficient.
2. As required by NG PAM (AR) 385-16, the inactive firing range should be decontaminated and clearance testing should be performed to verify the effectiveness of the cleanup.
3. Signage is needed in the Supply Room to warn of the radiation hazard.

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

Ft. Julius W. Hicks National Guard Armory
Lead Wipe Sample Analysis
Appendix E

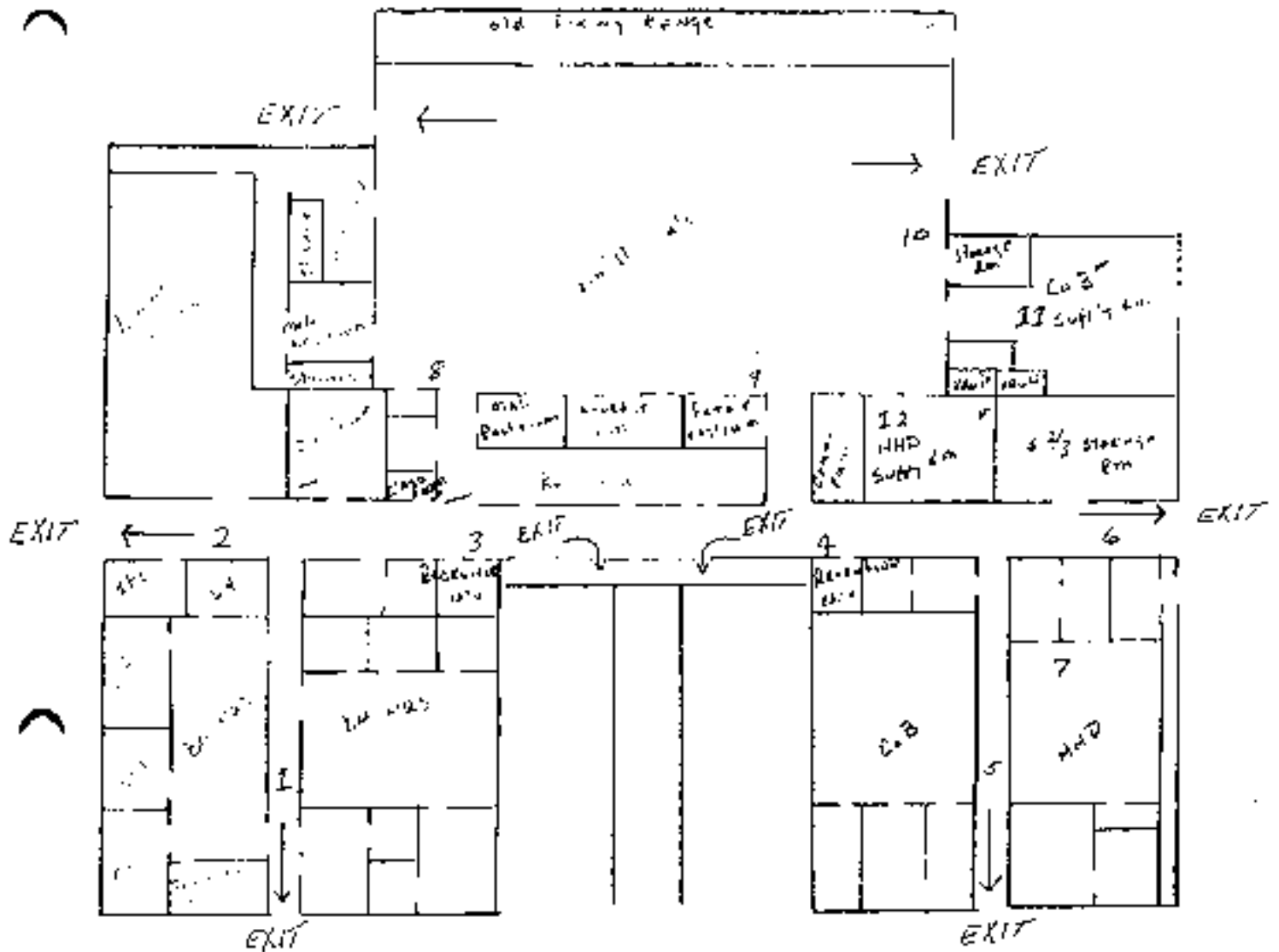
Sample No.	Location	Type Analysis	Micrograms /cubic ft ug/m3
E-01	Drill Fl., Overhead door	Lead	BRL
E-02	Drill Fl. Center of Floor	Lead	BRL
E-03	Drill Fl., near kitchen entrance	Lead	83.0
E-04	Kitchen, at entrance	Lead	31.0
E-05	Blank	Lead	BRL
E-06	Supply vent SGT Non-Responsive ofc	Lead	BRL
E-07	IFR, Bullet backstop		BRL
E-08	IFR, In front of bullet backstop	Lead	203
E-09	IFR, Rear wall next to entrance/exit	Lead	BRL
E-10	Blank	Lead	BRL
E-11	IFR, stored items	Lead	55.0

Sample no.	Location	Type of analysis	Ug/sq. ft
D-12	Sand from pit	Lead	11.1
D-13	Sand from pit	Lead	5.59

APPENDIX A

ANNEX A
BEST AVAILABLE COPY
FIRE EXTINGUISHER/EVACUATION PLAN
FORT JULIUS W. HICKS ARMOY

Enterprise



FIRE EXTINGUISHER LOCATIONS

EXTINGUISHER #

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8
- 9
- 10
- 11
- 12

APPENDIX B



APPENDIX C

PAC EPR

Trifium

[illegible]

Lost Name

First Name

[illegible]A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 15 rows of squares. A black rectangular tab is attached to the top right corner of the page.

Category

Personnel data provided by the facility is attached to this form

Remember to comment on problems, recommendations and needed control items.

Operation described is: SAt

and other operations, MAN, LOA:

3. several lights were missing and lighting was inadequate

15 stored in the source housing. Equipment containing a radioactive source

small warm rock and key

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to understand the target audience's preferences and pain points. Once a need is identified, the next step is to develop a concept that addresses this need. This concept should be innovative and differentiated from existing products in the market.

1. The first step in the process of creating a new product is to identify a market need. This involves conducting market research to understand the target audience's preferences and pain points. Once a need is identified, the next step is to develop a concept that addresses this need. This concept should be unique, valuable, and feasible. The third step is to create a prototype, which allows the team to test the concept and gather feedback. The fourth step is to refine the product based on the feedback received. Finally, the product is launched into the market, and the team monitors its performance and makes adjustments as needed.

100

1

Figure 1 shows a schematic diagram of a 1D chain of particles. A horizontal line represents the chain, with several small circles representing particles. A vertical line segment labeled 'L' indicates the length of the chain. A small circle labeled 'a' is shown below the chain, representing the distance between particles.

Received 10/10/09; accepted 12/01/2009.

$$F^{\text{tr}}: \text{Trans} \rightarrow \text{Constr} \text{ of } \text{constr}^{\text{tr}}(j, p, j, p, j)$$

Location SAH Operation SAH Survey Date 04/06/08 Year 04 Month 06 Day 08 MACOM NG

Supervisor ☒ Mr. ☐ Ms. [REDACTED]

Supervisor or Point of Contact telephone number 334 347 0054 DSN ☐ Commercial ☒ Open Surface Tanks ☒ Spray Booths ☒ Vapor Degreasers ☒ Lab Hoods ☒

Controls present (if > 6, continue in comments) (25)

Co. B Supply office
Co. B Supply storage

Building Number FTW Sub-MACOM XX RAC 3 Unit/Organization WAX

Room Number Supply Room Value Supply

Frequency (hrs/day) 16-37 No. CIVs 50-100 No. MIL 10 Contractors ☒ No. LOCs ☒

Ventilation Units ☒

Unit Code	Controls Required (25 char max per line)
<u>254</u>	<u>FTC</u>
<u>16-37</u>	<u>FTC</u>

BEST AVAILABLE COPY

BEST AVAILABLE COPY

Gloves	Respirator	Hearing	Eyes and Face	Body	Head and Feet
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	canal caps (>85-100dBA steady) earplugs helmets earmuffs muffs alone (100-118) muffle/earplug comb muffs and earplugs (118 or >) with time limit other other	chemical splash full face shield chemical safety impact safety impact welding helmet sunglasses resisting goggles/glasses laser eye protection other	aprons cold weather clothing coveralls full body suit hazmat reflective vest/suit safety belt/harness special purpose clothing other other	cold weather boots/shell hard hats impermeable boots safety shoes (conductive) safety shoes (nonconductive) other other other other

Requester's Recommendation

Reminders: ergonomics - dermalitis - physical agents - flammable storage
EYE (permanent) - EYE (portable) - SHW - GMV - LEV

MEDDAC FORM 609-R

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

Hazard Description

[illegible]

First Name

[illegible]

Remember to comment on problems, recommendations, and needed control items

2. Other operations: MAn, LOA

3. Weapons are stored in the vault. Equipment containing a radioactive source is stored in Supply room under lock & key.

W. Gombert and J. G. Hoffmann

MEDDAC **FORM 609-R**
JF'S MEDICAL
1 MAY 95

MEDDAC (FIM 609-R) **FORM 609-R**
MAY 95

Hazard Description

First Name

Category	Sex	MI
CH	M	
CH		
CH		
CH		

BEST AVAILABLE COPY

Remember to comment on problems, recommendations, and needed control items

2. other operations: OFF, MATH.

MEDDAC IF I MEADE) **FORM 609-R**
1 MAY 85

APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2300
31 January 1994

HQ PAW (AR) 385-18/
ANGPAM 91-101

Safety

GUIDELINES FOR CONVERTING INDOOR FIRING RANGES TO OTHER USES

Summary. This is a new pamphlet. The guidance prescribes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. This guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulation/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVN-SI).

Impact on New Manning Systems. This guidance does not contain information that affects the New Manning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements of DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau, Attn: NGB-AVN-SI, 111 South George Mason Drive, Arlington, VA 22204-1302.

Distribution. Distribution of this publication is made in accordance with the requirements on DA Form 12-09-E.

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1. Supporting Laboratories and Areas Served	

1. Purpose
This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.
2. References
Related publications are listed below.
 - a. DODI 6055.1 (Department of Defense Occupational Safety and Health (OSH) Program).
 - b. AR 11-34 (The Army Respiratory Protection Program).
 - c. AR 40-2 (Preventive Medicine).
 - d. HQP (AR) 385-13 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).
 - e. TB MED 402 (Occupational and Environmental Health: Respiratory Protection Program).
 - f. USAEHA TO 141 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).
 - g. Title 29, Code of Federal Regulations (CFR) revision, Part 1910 (Occupational Safety and Health Standards).

31 January 1994

NO Pam (AH) 335-16/ANCPAM 91-121

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

B-1 200 micrograms/sq ft or LESS

If all sample results are 200 micrograms/sq ft or less, the range can be converted and/or used for any purpose.

B-2 BETWEEN 201 and 200,000 micrograms/sq ft

Range must be decontaminated. Continue with cleaning instructions listed in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

B-3 ABOVE 200,000 micrograms/sq ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/sq ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/sq ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/sq ft limit.

B-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substratum. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE, that if your original wipe sample results were, for example, 175,000 ug/sq ft then you would have to reduce the lead level below 13,125 ug/sq ft. This would meet the 75 percent reduction criteria, however, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will show the latex paint to adhere to the substratum. If the paint peels, falls to the floor and is crushed over a period of time, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the converted range for signs of peeling paint. Paint chips can be analyzed for lead content. **DO NOT IGNORE PEELING PAINT IN A CONVERTED INDOOR FIRING RANGE.**

APPENDIX C INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

C-1 200 micrograms/sq ft or LESS

If all sample results are less than 200 micrograms/sq ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substratum.

C-2 ABOVE 200 micrograms/sq ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/sq ft level. If all sample results meet this criteria, a contrasting color of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of another equipment and load is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

APPENDIX E

Analytical Environmental Services, Inc.

Date: 3/26/2004

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region South H
 Project: Lead Analysis
 Delivery Order:
 PO No:

Lab Order: 0407411
 Date Received: 3/12/2004 10:25
 Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0407411-001A	Enterprise E-01	BRL	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-002A	Enterprise E-02	BRL	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-003A	Enterprise E-03	83.0	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-007A	Enterprise E-04	32.0	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-008A	Enterprise E-05	BRL	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-009A	Enterprise E-06	BRL	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-010A	Enterprise E-07	BRL	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-012A	Enterprise E-08	20.0	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-013A	Enterprise E-09	BRL	µg Total	20.0	1	6/30/2004	7/14/2004	EM
0407411-015A	Enterprise E-10	BRL	µg Total	25.0	1	6/30/2004	7/14/2004	EM
0407411-016A	Enterprise E-11	55.0	µg Total	20.0	1	6/30/2004	7/14/2004	EM

QASB007 RTD No Data in the Reporting Table

DI - Database Error

Analytical Environmental Services, Inc.

Date: 22-Jul-04

CLIENT:	National Guard Bureau Region-South IM	Client Sample ID:	Enterprise E-13
Lab Order:	0407411	Tag Number:	
Project:	Lead Analysis	Collection Date:	6/30/2004
Lab ID:	0407411-093A	Matrix:	SOIL

Analytes	Result	Limit Qual Units	BatchID	DP	Date Analyzed
METALS, TOTAL					
Lead	5.50	9W0010B 3.22 mg/Kg	(9W3050B) 47811	1	Analyst: CDW 7/13/2004 7:01:00 PM

Qualifiers:	<ul style="list-style-type: none"> * Value exceeds Maximum Contaminant Level REL: Below Reporting Limit H: Holding time for preparation or analysis exceeded N: Analyte not NELAP certified R: Lab Reporting Error 	<ul style="list-style-type: none"> D: Analyte detected in the associated Method Step F: Value above quantitation range J: Analyte detected before quantitation limits P: NELAP analyte not/has not passed S: Spike Recovery not/has not passed
--------------------	---	---

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT:	National Guard Bureau Region-South TH	Client Sample ID:	Enterprise E-12
Lab Order:	0407411	Tag Number:	
Project:	Lead Analysis	Collection Date:	6/10/2004
Lab ID:	0407411-092A	Matrix:	SOIL

Analytes	Result	Limit	Qual	Units	Batch/N	DN	Date Analyzed
METALS, TOTAL		0.000100	(SW00000)				Analyst: CDW
Lead	4.64			mg/kg	47811	1	7/13/2004 6:57:00 PM

Qualifiers:	A	Value exceeds Maximum Contaminant Level	A	Analyte detected at the specified highest level
	RL	Below Reporting Limit	G	Value above quantitation range
	K	Holding time for preliminary analysis exceeded	J	Analyte detected below quantitation level
	S	Analyst not NELAP certified	P	NELAP analysis certification pending
Re: Lab Reporting Limit			S	Spill Recovery detection exception from reporting limit

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APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Julius W. Hicks National Guard Armory, Enterprise, Alabama.

Fort Julius W. Hicks Armory
Employee List

Non-Responsive





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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COL [Non-Responsive] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: CPT [Non-Responsive] Facility Supervisor, 4206 Gault Ave NW, Ft. Payne, AL 35967.

SUBJECT: Industrial Hygiene Survey of the Ft. Payne Armory.

1. References.

- a. Report completed 19 February 2007, Industrial Hygiene report for the Payne Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the FT. Payne Armory.

b. Ms [Non-Responsive] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations. Contact the Regional Southeast Industrial Hygiene Office once the Armory renovation is complete. Reschedule a baseline Industrial Hygiene survey once renovation is complete and is reoccupied. Request lead swipe sampling be conducted in the converted indoor firing range.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

19 February 2007

MEMORANDUM FOR: FT Payne Armory, ATTN: CPT [REDACTED] 4206 Gault Avenue NW,
Ft Payne, Alabama 35967

SUBJECT: Industrial Hygiene Survey of Ft Payne National Guard Armory, Ft Payne, Alabama

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 Ft Payne National Guard Armory, Ft Payne, Alabama

2. 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 the Ft Payne National Guard Armory Ft Payne, Alabama on 13 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory.

3. Facility Description. The Ft Payne Armory is under construction. The completion date for the building is September 2007. Several additions have been made to the original Armory. The facility diagram with an outline of the additions is within the enclosure of the report.

4. Findings.

a. An indoor range was in the original building. The range was deactivated in 1987 because of an inadequate ventilation system. Laboratory results indicate that sampling was performed 28 July 2003. Samples were taken from the range back stop and from the sand in the pit. The results of the backstop were 196.4 mg/sample and .244 mg/sample. The result from the sand was 395.8 mg/sample. The foreman of the construction company stated that the area was cleaned prior their arrival.

b. Floor tiles were analyzed for Asbestos in rooms 105, 108, and 115 prior to construction. The tiles in rooms 105 and 108 contained 3% and 10% Chrysotile asbestos. The tiles in room 115 contained trace amounts of Asbestos. The floor tiles that tested positive were removed.

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

Page 2

SUBJECT: Industrial Hygiene Survey of Ft Payne National Guard Armory, Ft Payne, Alabama

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Non-Responsive

LAE Consulting

5 Encl

1. Building Diagram
 2. HHIM
 3. Facility Photos
 4. Laboratory Results
 5. MSDS
- CF: Alabama

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

Page 3

SUBJECT: Industrial Hygiene Survey of Ft Payne National Guard Armory, Ft Payne, Alabama

6. Recommendations.

a. Recommend a baseline Industrial hygiene survey be conducted after the Armory is completed.

b. Recommend the Alabama Safety and Occupational Health office collect additional lead wipe samples within the areas that were occupied by the range.

100-1000000
1218 Standard Paper Co., Sec. 10, Mtn. View 20144
Mtn. View, 1410 1551-2717

Page 8

New Addition



Fire Classification

A. Wood, Paper, Textile or Rubbish.

B- Flammable Liquids, Gases or Grease.

C-Electrical

*key --- denotes new add
Addition



View of the Fort Payne Armory, Ft Payne, Alabama



View of construction at the Ft Payne Armory



View of construction at the Ft Payne Armory



View of construction at the Ft Payne Armory



View of construction at the Ft Payne Armory



View of construction at the Ft Payne Armory



View of the former range (pit area)



View of wall within the converted range



View of the Drill Hall of the Fort Payne Armory



Interior view of the building addition



Interior view of the building addition



*INDUSTRIAL HYGIENE REGION SOUTHEAST
ARMY NATIONAL GUARD
510 AIRPORT PLAZA, SUITE 1530
COLLEGE PARK, GEORGIA 30349-6021*

NGB-ARS-SEIH

May 18 2008

MEMORANDUM FOR: LTC **Non-Responsive** Administrative Officer, HHC, 135th
Sustainment Command, ALANG, 2100 S. Lakeshore Drive, Homewood, AL 35209-
6728.

SUBJECT: Industrial Hygiene Survey of converted Indoor Firing Range (IFR) of Fort
William C. Mulkey Armory.

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. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges.
- j. Departments of the Army and Air Force, NGB-ADE-OM, subject: All State Log Number (1920323) Indoor Range Clean-up at State Owned Armories, 28 July 1992.

SUBJECT: Industrial Hygiene Survey of converted Indoor Firing Range of Fort William C. Mulkey Armory.

2. **General.** At the request of the Alabama Safety & Occupational Health Office, LTC [REDACTED] lead in air sampling was conducted in the converted Indoor Firing Range of Fort William C. Mulkey National Guard Armory in Homewood, AL.
3. **Purpose.** The purpose of the survey was to collect lead in air samples from an indoor firing range that had been converted into three classrooms. The survey consisted of a walk through inspection and lead in air sampling of the three rooms converted. Interviews were conducted with SFC [REDACTED] to gather information relative to the various operations at the Armory. The main concern was possible high lead levels in the three rooms of concern that was once an IFR, especially since swipe samples revealed lead levels of concern in and around the back stop. The classroom closest to the back stop was not in use. There were items stored in this room near the back stop.
4. **Facility Description:** This facility house the HHC, 135th Sustainment Command. The soldiers perform administrative duties Monday through Friday between 0630 and 1730 hours. The facility is in need of space and has installed a battery of small rooms in over one half of the drill hall floor. The need for extra space was why the Indoor Firing Range was converted into the three classrooms.
5. **Findings** All air samples were < less than record able levels. There was no lead in the air at the time of the sampling.

Sample results

Air Samples	Results
MKF - 3020	<0.000237 (mg/m3)
MKF - 3021	<0.000237 (mg/m3)
MKF - 3022	<0.000249 (mg/m3)
MKF - 3023	<0.000238 (mg/m3)
MKF - 3023	<0.000238 (mg/m3)
MKF - 3024	<0.000250 (mg/m3)
MKF - 3025	<0.000240 (mg/m3)

Two air samples were taken in each of the three rooms at breathing zone levels. All lead sample results came back less than the detectable limits. There is no lead in air problem at this time.

Air Sample Standard - .05mg/m³=PEL

6. Recommendations.

- a. Do not use the room closest to the Indoor Firing Range back stop.
- b. Do not remove any items in the above room unless the items are tested for lead before removal.
- c. During conversion of IFR and removal of back stop close the other two classrooms until conversion and lead testing is complete.

7. If additional information is needed about this report, please contact **Non-Responsive**
Non-Responsive Regional Industrial Hygienist, ARNG-ARS-SEIH, 1-800-362-0262 OR
COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: Office of the Adjutant General, ATTN: LTC, **Non-Responsive** Alabama State Safety and
Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

SFC **Non-Responsive** Safety NCO/Assistant, HHC, 135th Sustainment Command,
Alabama Army National Guard, 2100 S. Lakeshore Drive, Homewood, AL 35209-6728.

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

NGB-AVN-SI

September 18, 2004

MEMORANDUM FOR The Alabama Army National Guard, ATTN: MAJ. [Non-Responsive]
[Non-Responsive] Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711

SUBJECT: Industrial Hygiene (IH) Survey of the Indoor Firing Range at George C. Wallace National Guard Armory.

1. References.

- a. AR 385-10, The Army Safety Program, 29 February 2000.
- b. AR 40-5, Preventive Medicine, 15 October 1990. [05/2002 Being Updated]
- c. NGB 385-15, Policy and responsibilities for Inspection/Evaluation and use of ARNG Indoor Firing Ranges, 30 March 1990. [11/02 Under Revision]
- d. OSHA Standards 29 CFR (Code of Federal Regulations), 1910.1025, Lead Standard.
- e. TB MED 530, The Army Industrial Hygiene Program.
- f. Report, 23 December 2004, "Industrial Hygiene (IH) Survey of the Indoor Firing Range at George C. Wallace National Guard Armory."

2. General.

- a. At the request of MAJ [Non-Responsive] of the Alabama State Safety and Occupational Health Office a special industrial hygiene study was conducted to evaluate the Indoor Firing Range at the George C. Wallace Armory in Montgomery, Alabama.
- b. The purpose of the study was to sample for possible lead exposure when firing weapons in the Indoor Firing Range at George C. Wallace National Guard Armory.
- c. On July 28th 2004 twenty breathing zone and general area samples were taken while Alabama National Guard soldiers were qualifying in the George C. Wallace Armory Indoor Firing Range.

3. Findings

- a. Air samples were taken while the qualifier was at the prone, kneeling and standing position of each of the five firing lanes. General area samples were also taken. Thirteen individuals qualified during the period of the testing. The sample results are as follows:

Sample #	Time Weighted Average	8Hr Time Weighted Average
Non-Responsive	0.00698 mg/m ³	0.0010 mg/m ³
	0.00329 mg/m ³	0.0005 mg/m ³
A	0.00295 mg/m ³	0.0005 mg/m ³
	0.00454 mg/m ³	0.0014 mg/m ³
5MA	0.00572 mg/m ³	0.0009 mg/m ³
General Area 6MA	0.00668 mg/m ³	0.0022 mg/m ³
General Area 9MA	0.00111 mg/m ³	0.0004 mg/m ³
10 MA	0.00137 mg/m ³	0.0005 mg/m ³
General Area 11MA	0.00540 mg/m ³	0.0017 mg/m ³
MA	0.00753 mg/m ³	0.0014 mg/m ³
1A	0.00834 mg/m ³	0.0009 mg/m ³
MA	0.00511 mg/m ³	0.0006 mg/m ³
MA	0.0124 mg/m ³	0.0012 mg/m ³
MA	0.0123 mg/m ³	0.0012 mg/m ³
18MA	0.00738 mg/m ³	0.0069 mg/m ³
9MA	0.00829 mg/m ³	0.0007 mg/m ³
1A	0.00807 mg/m ³	0.0007 mg/m ³

b. The above results revealed all lead sample results were below the eight hour Time Weighted Exposure (TWA) limit of .050 milligrams per cubic meter and the action level of .030 milligrams per cubic meter for an eight hour TWA day.

4. Discussion. Lead sampling indicated that while qualifying with 9 mm hand weapons the lead results did not exceed the permissible exposure limits. This does not mean that lead results would be the same if using different weapons for qualifying. This is important because at the present time the range does not meet the ventilation standards to be considered a safe range. Larger weapons and bullets will generate higher lead levels.

5. If additional information is needed about this report, please contact Non-Responsive Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

**INDUSTRIAL HYGIENE REGION SOUTHEAST
ARMY NATIONAL GUARD
510 AIRPORT PLAZA, SUITE 1530
COLLEGE PARK, GEORGIA 30349-6021**

NGB-AVN-SI SE

Sept 16, 2004

MEMORANDUM FOR: Mark Clark Armory, ATTN: CW4 [REDACTED] 7220 Cross County
Rd Charleston, SC 29418

SUBJECT: Industrial Hygiene Survey of General Mark Clark National Guard Armory.

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. NG PAM 385-16, Conversion of Indoor Firing Ranges to other Uses, 31 January 1994. [2002 Under Revision-Refer to All-States Ltr P01-0075 for current guidance]
- j. Departments of the Army and Air Force, NGB-ADE-OM, subject: All State Log Number (I920323) Indoor Range Clean-up at State Owned Armories, 28 July 1992.

SUBJECT: Industrial Hygiene Survey of General Mark Clark National Guard Armory, North Charleston, South Carolina.

2. **General.** At the request of the South Carolina Safety & Occupational Health Office in Columbia, SC lead paint sampling was collected in the General Mark Clark National Guard Armory in North Charleston, SC.
3. **Purpose** The purpose of the survey was to collect air and bulk paint samples from the walls and in areas where paint was peeling from the walls of the Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Armory. Interviews were conducted with Sgt. [REDACTED] to gather information relative to the various operations at the Armory. The concern was possible high lead levels in the paint peeling off the walls.
4. **Facility Description:** This facility house the following units, which include the 105th South Carolina Headquarters Battalion, 116th Signal Company, 678th Engineering Battalion and the 218th MI Company. The armory has a total of 27 full time soldiers plus one recruiter. The soldiers perform administrative duties Monday through Friday between 0630 and 1600 hours. Each unit maintains an administrative, supply and arms room. The Armory indoor firing range is now used as a storage area. The physical structure is a one story gray brick dwelling built in 1986.
5. **Findings.**
 - a. All paint chip samples were BRL (Below Readable Levels) and all air samples were < (less than record able levels. There was no lead in the air or in the paint chips.
 - b. Lead swipe samples taken in the Indoor Firing Range that had been converted to storage revealed lead on the floor inside the bullet trap exceeding 200 micrograms.

Sample results Lead wipes Indoor Firing Range

Black Center wall	BRL
Floor inside Bull stop	665
On the flood outside Bull stop	47.0
Back plummet wall	BRL
Outside Door of range	BRL
Kitchen on top of ice maker	BRL
Vent on top of ice machine	66.0
Blank	BRL

Paint Chip Samples		Results
Supply room inside front Door		BRL
Outside Supply Room Door		BRL
Outside IFR Room 105		BRL
Class #1 Back wall Room 132		BRL
Room #158A Asvab testing		BRL
Orderly room		BRL
Air Samples		Results
Non-Responsive		<0.000339 (mg/m3)
sk		<0.000331 (mg/m3)
Supply room Table		<0.000331 (mg/m3)
Locker		<0.000337 (mg/m3)

Air Sample Standard - .05mg/m3=PEL

6. Recommendations.

- a. There is no lead problem with the paint on the walls. Remove peeling paint from walls and repaint as seen fit.
- b. Resample (swipe) the Indoor Firing Range to determine the extent of the cleanup needed.

8. If additional information is needed about this report, please contact Non-Responsive Industrial Hygiene Technician, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety and Occupation Health Office, ATTN: MAJ Non-Responsive South Carolina Army National Guard.

Enclosures

INDUSTRIAL HYGIENE AIR SAMPLE DATA

For **Non-Responsive**

2: the respondent is **BSH-10**.

Return Address: NGB/TH
510 Plaza Drive, Suite 1530
College Park, GA 30349

Point of Contact (name/AUTOVON)
404.559-4174

Associated Bulk Samples
☒ Yes ☐ No

Bulk Sample No(s):

Samples Collected By
Non-Responsive

Date Collected: 6/15/04
Date Shipped: 6/17/04

ARLOC

Project Number
SC ARMS-040701501

Sampled Installation
North Charleston Naval Air Station

Location (BLDG/AREA)
Armory

Description of Operation (details on reverse)
LEAD BASE Paint on Wall

☐ Persons Exposed ☒ Hrs/Day

Method of Collection
Air Sample

Associated Complaints (be specific) (state NONE if applicable)

Analysis Desired

LEAD

Sampling Data

Sample No.	1	2	3	4				5
Pump No.	2307	2338	2330	2214				
Time On:	0940	0941	0941	0943				
Time Off:	2:35	2:31	2:31	2:30				
Total Time (min)	295	302	302	297				
Flow Rate (LPM)	2L	2L	2L	2L				
Volume (Liters)								
GA/BZ	BZ	GA	GA	GA				
Employee Name/ID	ARKINS	DESK	TABLE	LOCKER				
Laboratory No.								

Results

Comments to Lab:

Lab Use Only

Analyst (initials)

Reviewed By (initials)

Date Received

Date Dispatched

AEHA Form 9-R, 1 Oct 84

Replaces AEHA Form 9, 1 Oct 80 which is obsolete.

RECEIVED

Non-Responsive 6/18/04 1300

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ord #J-15-0085 (M.S. Manual)
ational Guard Bureau
Page 369 of 759

Analytical Results
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for

National Guard Bureau Region-South IH

WorkOrder: 0406A10

Client Reference: North Charleston Armory

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed /Analyte
	(ug)	(mg/m ³)	(ppm)				
Client ID: 1 Lab ID: 001A Date Sampled: 6/15/2004 Media: Filter Air Vol(L): 590							
Lead	<0.200	<0.000339	—	0.2		NIOSH 7300	06/21/2004 CDW
Client ID: 2 Lab ID: 002A Date Sampled: 6/15/2004 Media: Filter Air Vol(L): 604							
Lead	<0.200	<0.000331	—	0.2		NIOSH 7300	06/21/2004 CDW
Client ID: 3 Lab ID: 003A Date Sampled: 6/15/2004 Media: Filter Air Vol(L): 604							
Lead	<0.200	<0.000331	—	0.2		NIOSH 7300	06/21/2004 CDW
Client ID: 4 Lab ID: 004A Date Sampled: 6/15/2004 Media: Filter Air Vol(L): 594							
Lead	<0.200	<0.000337	—	0.2		NIOSH 7300	06/21/2004 CDW
Client ID: BLANK Lab ID: 005A Date Sampled: 6/15/2004 Media: Filter Air Vol(L): NA							
Lead	<0.200	—	—	0.2		NIOSH 7300	06/21/2004 CDW

(a) Analysis indicates possible breakthrough; back section result is greater than 0% of the front section result.

General Notes:

<: Less than the indicated limit of detection (LOD).

—: Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

Industrial Hygiene Surface Wipe Sample Sheet

Return Address

Non-Responsive

NGB/IH
510 Plaza Drive, Suite 1530
College Park, GA 30349

Point of Contact (name & phone #)

404.559-4174

Samples Collected By

Non-Responsive

Sampled Facility

GEN

City

Charleston

State

SC

Location (bldg/area)

Description of Operation

Paint Chips in Bulk from Armory

Date

Collected

6/15/04

Date Shipped

6/16/04

Analysis Desired

Sampling Data

Lab Use Only

Sample #

Results

Remarks

1

Inside of 7th Door Supply Room

2

Outside Supply Room Door 143A Rm #

3

Outside IFR Room 105

4

Back Wall Classroom #1 Room 132

5

Airway Testing Room #132A

6

Back Wall 6th Dr. Entry Room

Comments to Lab.

BEST AVAILABLE COPY

Analytical Environmental Services, Inc.**Date:** 09-Sep-04**CLIENT:** National Guard Bureau Region-South IH**Client Sample ID:** 1**Lab Order:** 0406A08**Tag Number:****Project:** Charleston Armory**Collection Date:** 6/15/2004**Lab ID:** 0406A08-001A**Matrix:** PAINT

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
TOTAL METALS IN PAINT							Analyst: SSS
Lead	BRL	0.00921		wt%	48674	1	6/22/2004 8:34:00 AM

Qualifiers:	-	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	DRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
Rpt Limit	Reporting Limit		S	Spike Recovery outside accepted recovery limits

Page 1 of 6

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

Released by National Guard Bureau

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Analytical Environmental Services, Inc.

Date: 09-Sep-04

CLIENT: National Guard Bureau Region-South IH
Lab Order: 0406A08
Project: Charleston Armory
Lab ID: 0406A08-002A

Client Sample ID: 2
Tag Number:
Collection Date: 6/15/2004
Matrix: PAINT

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
TOTAL METALS IN PAINT							
Lead	BRL	0.00978		wt%	46874	1	6/22/2004 8:34:00 AM

Qualifiers:	"	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding time for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

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FOIA Requested Record #J-15-0085 (AL)
 Released by National Guard Bureau
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BEST AVAILABLE COPY

Analytical Environmental Services, Inc.

Date: 09-Sep-04

CLIENT: National Guard Bureau Region-South IH
 Lab Order: 0406A08
 Project: Charleston Armory
 Lab ID: 0406A08-003A

Client Sample ID: 3
 Tag Number:
 Collection Date: 6/15/2004
 Matrix: PAINT

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
TOTAL METALS IN PAINT							
Lead	BRL	0.00961		wt%	46874	1	6/22/2004 8:34:00 AM

Qualifiers:	*	Value exceeds Maximum Contaminant Level	B	Analyte detected in the associated Method Blank
	BRL	Below Reporting Limit	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits
	N	Analyte not NELAC certified	P	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	S	Spike Recovery outside accepted recovery limits

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FOIA Requested Record #J-15-0085 (AL)
 Released by National Guard Bureau
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BEST AVAILABLE COPY

Analytical Environmental Services, Inc.

Date: 09-Sep-04

CLIENT: National Guard Bureau Region-South IH
 Lab Order: 0406A08
 Project: Charleston Armory
 Lab ID: 0406A08-004A

Client Sample ID: 4
 Tag Number:
 Collection Date: 6/15/2004
 Matrix: PAINT

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
TOTAL METALS IN PAINT				PAINT			Analyst: SSS
Lead	BRL	0.00950		wt%	46874	1	6/22/2004 8:34:00 AM

Qualifiers:
 ~ Value exceeds Maximum Contaminant Level
 BRL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAC certified
 Rpt Limit Reporting Limit

B Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P NELAC analyte certification pending
 S Spike Recovery outside accepted recovery limits

Page 4 of 6

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FOIA Requested Record #J-15-0085 (AL)
 Released by National Guard Bureau
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BEST AVAILABLE COPY

Analytical Environmental Services, Inc.

Date: 09-Sep-04

CLIENT: National Guard Bureau Region-South IH
Lab Order: 0406A08
Project: Charleston Armory
Lab ID: 0406A08-005A

Client Sample ID: 5
Tag Number:
Collection Date: 6/15/2004
Matrix: PAINT

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
TOTAL METALS IN PAINT							Analyst SSS
Lead	BRL	0.0100		wt%	46874	1	6/22/2004 8:34:00 AM

Qualifiers:

- Value exceeds Maximum Contaminant Level
- BRL Below Reporting Limit
- H Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- Rpt Limit Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P NELAC analyte certification pending
- S Spike Recovery outside accepted recovery limits

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FOIA Requested Record #J-15-0085 (AL)
 Released by National Guard Bureau
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BEST AVAILABLE COPY

Analytical Environmental Services, Inc.

Date: 09-Sep-04

CLIENT: National Guard Bureau Region-South IH
Lab Order: 0406A08
Project: Charleston Armory
Lab ID: 0406A08-006A

Client Sample ID: 6
Tag Number:
Collection Date: 6/15/2004
Matrix: PAINT

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
TOTAL METALS IN PAINT							
Lead	BRL	0.00994		wt%	46874	1	6/22/2004 8:34:00 AM

Qualifiers:

- * Value exceeds Maximum Contaminant Level
- BRL Below Reporting Limit
- II Holding times for preparation or analysis exceeded
- N Analyte not NELAC certified
- Rpt Limit Reporting Limit

- B Analyte detected in the associated Method Blank
- E Value above quantitation range
- J Analyte detected below quantitation limits
- P NELAC analyte certification pending
- S Spike Recovery outside accepted recovery limits

Page 6 of 6

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FOIA Requested Record #J-15-0085 (AL)
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0406A09

Industrial Hygiene Surface Wipe Sample Sheet

Return Address

Non-ResponsiveNGB/IH
510 Plaza Drive, Suite 1530
College Park, GA 30349

Point of Contact (name & phone #)

559-4174

Non-Responsive

Sampled Facility

Charleston

State

SC

Location (bldg/area)

Description of Operation

Old Indoor Firing Range / Storage

Date Collected

6/15/04

Date Shipped

6/16/04

Analysis Desired

LEAD

Sampling Data

Lab Use Only	Sample #	Results	Remarks
	1		BACK CENTER WALL
	2		FLOOR INSIDE Bulk Shop
	3		DN Floor Outside ^{Bull} Shop
	4		BACK plum wall
	5		Outside Door of
	6		Kitchen outtop of ^{ICE} MAKER
	7		Vent outtop of ^{ICE} MAKER

Comments to Lab:

RECEIVED

Non-Responsive

6/18/04 13:00 4.5. Mark

BEST AVAIL

Record #J-15-0085 (AL)
National Guard Bureau
Page 378 of 759

Analytical Environmental Services, Inc.**Date:** 6/24/2004**TOTAL LEAD IN WIPE SAMPLES
N7082**

CLIENT: National Guard Bureau Region-South IH
Project: North Charleston Armory
Delivery Order: SCARNG-04061
PO No:

Lab Order: 0406AD9
Date Received: 6/18/2004 1:00:0
Matrix: Paint
Analyst: BB

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed
0406AD9-001A	1	BRL	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-002A	2	665	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-003A	3	47.0	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-004A	4	BRL	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-005A	5	BRL	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-006A	6	BRL	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-007A	7	66.0	µg. Total	20.0	1	6/15/2004	6/21/2004
0406AD9-008A	BLANK	BRL	µg. Total	20.0	1	6/15/2004	6/21/2004

Legend: ND - Not Detected at the Reporting Limit

DF - Dilution Factor

LEAD ANALYSIS - PEL = 50 $\mu\text{g}/\text{m}^3$ Action Level = 30 $\mu\text{g}/\text{m}^3$

$$TWA = \frac{C_{T1} + C_{T2}}{T_1 + T_2}$$

$$\frac{(\mu\text{m}) (\text{hr})}{\text{Time}} = \text{Concentration}$$

$$69 = 1.15 \quad 0.00698 \quad = 6.98 \mu\text{g}/\text{m}^3 \quad \dots 0.010$$

Dandridge 1MA

Mullins 2MA

$$74 = 1.23 \quad 0.00329 \quad = 3.29 \mu\text{g}/\text{m}^3 \quad - 0.005$$

Robinson 3MA

$$74 = 1.23 \quad 0.00295 \quad = 2.95 \mu\text{g}/\text{m}^3 \quad - 0.005$$

* Kirkley 4MA

$$75 = 1.25 \quad 0.00464 \quad = 4.64 \mu\text{g}/\text{m}^3 \quad \frac{4.54(1.25) + 7.53(1.75)}{1.25 + 1.75} = 5.69 \mu\text{g}/\text{m}^3$$

Morgenson 5MA

$$76 = 1.21 \quad 0.00572 \quad = 5.72 \mu\text{g}/\text{m}^3 \quad - 0.011$$

GA 6MA

$$159 = 2.45 \quad 0.00645 \quad = 6.45 \mu\text{g}/\text{m}^3 \quad - 0.02$$

GA 9MA

$$166 = 2.77 \quad 0.00611 \quad = 6.11 \mu\text{g}/\text{m}^3 \quad - 0.04$$

Davis 10MA

$$167 = 2.78 \quad 0.00631 \quad = 6.31 \mu\text{g}/\text{m}^3 \quad - 0.05$$

GA 11MA

$$154 = 2.57 \quad 0.00540 \quad = 5.40 \mu\text{g}/\text{m}^3 \quad - 0.07$$

* Kirkley 13MA

$$47 = .78 \quad 0.00763 \quad = 7.63 \mu\text{g}/\text{m}^3 \quad \frac{4.54(1.25) + 7.53(1.75)}{1.25 + 1.75} = 5.69 \mu\text{g}/\text{m}^3$$

Stone 14MA

$$55 = .92 \quad 0.00834 \quad = 8.34 \mu\text{g}/\text{m}^3 \quad - 0.004$$

Ziggle 15MA

$$56 = .93 \quad 0.00911 \quad = 9.11 \mu\text{g}/\text{m}^3 \quad - 0.006$$

Brown 16MA

$$48 = .80 \quad 0.0124 \quad = 12.4 \mu\text{g}/\text{m}^3 \quad - 0.012$$

Dawley 17MA

$$43 = .80 \quad 0.0123 \quad = 12.3 \mu\text{g}/\text{m}^3 \quad - 0.02$$

Morgenson 18MA

$$45 = .75 \quad 0.00733 \quad = 7.33 \mu\text{g}/\text{m}^3 \quad - 0.001$$

Morgenson 19MA

$$45 = .67 \quad 0.00824 \quad = 8.24 \mu\text{g}/\text{m}^3 \quad - 0.007$$

$$40 = .67 \quad 0.00807 \quad = 8.07 \mu\text{g}/\text{m}^3$$

LEAD ANALYSIS - PEL = $50 \mu\text{g}/\text{m}^3$ Action Level = $30 \mu\text{g}/\text{m}^3$

SAMPLE#		$\frac{(\mu\text{in})(\text{hr})}{\text{Time}}$	$\frac{(\text{mg}/\text{m}^3)}{\text{Concentration}}$	$= \frac{\text{mg}}{\text{m}^3} \times \frac{1000 \mu\text{g}}{1 \text{ mg}} = \frac{0.00000}{\text{m}^3} = 7 \text{ WA} = \frac{C_1 T_1 + C_2 T_2}{T_1 + T_2}$	
Daniels	1 MA	69 = 1.15	0.00698	=	$6.98 \mu\text{g}/\text{m}^3$
Mullins	2 MA	74 = 1.23	0.00329	=	$3.29 \mu\text{g}/\text{m}^3$
Robinson	3 MA	74 = 1.23	0.00295	=	$2.95 \mu\text{g}/\text{m}^3$
* Kirkley Land	4 MA	75 = 1.25	0.00454	=	$4.54 \mu\text{g}/\text{m}^3$ $\frac{4.54(1.25) + 7.53(1.75)}{2.03} = 5.69 \mu\text{g}/\text{m}^3$
Mongemag	5 MA	76 = 1.27	0.00572	=	$5.72 \mu\text{g}/\text{m}^3$
GA	6 MA	159 = 2.65	0.00668	=	$6.68 \mu\text{g}/\text{m}^3$
GA	9 MA	166 = 2.77	0.00111	=	$1.11 \mu\text{g}/\text{m}^3$
Davis	10 MA	167 = 2.78	0.00137	=	$1.37 \mu\text{g}/\text{m}^3$
GA	11 MA	154 = 2.57	0.00540	=	$5.40 \mu\text{g}/\text{m}^3$
* Kirkley Land	13 MA	47 = .78	0.00753	=	$7.53 \mu\text{g}/\text{m}^3$ $\frac{4.54(1.25) + 7.53(1.75)}{2.03} = 5.69 \mu\text{g}/\text{m}^3$
Stone	14 MA	55 = .92	0.00834	=	$8.34 \mu\text{g}/\text{m}^3$
Elmore	15 MA	56 = .93	0.00911	=	$9.11 \mu\text{g}/\text{m}^3$
Brown	16 MA	48 = .80	0.0124	=	$12.4 \mu\text{g}/\text{m}^3$
Daily	17 MA	48 = .80	0.0123	=	$12.3 \mu\text{g}/\text{m}^3$
Crawford	18 MA	45 = .75	0.00738	=	$7.38 \mu\text{g}/\text{m}^3$
Holkins	19 MA	46 = .67	0.00829	=	$8.29 \mu\text{g}/\text{m}^3$
Smart	20 MA	46 = .67	0.00857	=	$8.57 \mu\text{g}/\text{m}^3$

Assuming work environment is consistent during the day, the samples taken are representative 8hr TWAs.

With that said none of the samples exceed OSHA's PEL for lead of $50 \mu\text{g}/\text{m}^3$.

No ceiling given. So it just cannot exceed the PEL.

INDUSTRIAL HYGIENE AIR SAMPLE DATA

0408090

For use of this form see USAEHA IG 141; the proponent is RSHB-LO.

Return Address (complete address including Zip Code)

Non-Responsive510 Plaza Drive, Suite 1530
College Park, GA 30349

Point of Contact (name/AUTOVON)

Non-Responsive

404.559-4174

WGB/IH

Associated Bulk Samples

☐ Yes ☒ No

Bulk Sample No(s):

Samples Collected By

Non-Responsive

Date Collected

28 Jul 04

Date Shipped

Project Number

ALANK04022801

Sampled Installation

Fort GEORGE C. WALLACE Army

ARLOC

☐ ☐ ☐ ☐ ☐

Location (BLDG/AREA)

AL Armory-1750

Description of Operation (details on reverse)

Test Firing

☒ Persons Exposed☐ Hrs/Day

Method of Collection

SKC Pumps/37mm 3x GAS. URG NICE

Associated Complaints (be specific) (state NONE if applicable)

Analysis Desired

Sampling Data

Sample No.	1MA	2MA	3MA	4MA	5MA	6MA	7MA	8MA
Pump No.	561809	537638	537711	537884	537341	563130	563930	
Time On	0839	0845	0845	0846	0846	0830	0830	
Time Off	0930	0931	0931	0931	0932	1109		
Total Time (min)	69min	74min	74min	75min	76min	159min		
Flow Rate (LPM)	2L	2L	2L	2L	2L	2L		
Volume (Liters)	138	148	148	150	152	308		
GA/BZ	BZ	BZ	BZ	BZ	BZ	GA		
Employee Name/ID	TA293	MD850	K0261	K0261	M8114			
Laboratory No.								

Results

Comments to Lab:

Lab Use Only

Analyst (initials)

Reviewed By (initials)

Date Received

Date Dispatched

Calibration Information

Pump No.	Calibration (L/min)		Rotometer Setting	Date
	Pre-Use	Post-Use		
560809	2019	2016		28
537638	2041	2012		
537711	1970	1969		
537584	2056	2/21		
537341	2038	2059		

Name of Calibrator

Mini Buck Calibrator

Operation

Source of Contaminant:

Operation Employee(s) Perform:

Ventilation:

☐

Local Exhaust

☐

General Area

☐

None

Personal Protective Equipment (check if worn)

- ☐ Respiratory Protective Equipment Type: _____
- ☐ Protective Clothing Type: _____
- ☐ Gloves Type: _____
- ☐ Goggles/Face Shield
- ☐ Ear Protection
- ☐ Other: _____

Field Notes/Additional Comments

Non-Responsive

BEST AVAILABLE COPY
Analytical Results
for

National Guard Bureau Region-South III

WorkOrder: 0408090

Client Reference: AL AN604072800

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed / Analyst
	(ug)	(ug/m ³)	(pphm)				
Client ID: 1MA	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): 148	
Lead	0.964	0.00598	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 2MA	Lab ID: 002A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): 148	
Lead	0.487	0.00350	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 3MA	Lab ID: 003A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): 148	
Lead	0.437	0.00295	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 4MA	Lab ID: 004A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): 150	
Lead	0.682	0.00454	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 5MA	Lab ID: 005A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): 152	
Lead	0.870	0.00572	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 6MA	Lab ID: 006A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): 308	
Lead	2.06	0.00668	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 7MA	Lab ID: 007A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): NA	
Lead	<0.200	--	--	0.2		NIOSH 7300	08/04/2004 CDW
Client ID: 8MA	Lab ID: 008A	Date Sampled: 7-28-2004		Media: Filter		Air Vol(L): NA	
Lead	<0.200	--	--	0.2		NIOSH 7300	08/04/2004 CDW

mt. Analysis indicates possible breakthrough. Back section result is greater than 10% of the front section result.

General Note:

-- Less than the indicated limit of detection (LOD).

-- Information not available on the applicator.

Back sections were checked and showed no significant breakthrough.

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client G.A. NGB Work Order Number 0408090Checklist completed by Ahmet Gön 8/3/4
Signature DateCarrier name: FedEx ☐ UPS ☐ Courier ☐ China ☐ 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)° 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 CCM? 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 ☐

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

C:\Documents and Settings\Chemist\Desktop\SampleReceiptChecklistRptREV.rtf

Analytical Environmental Services, Inc.

Date: 09-10-03

CLIENT: National Guard Bureau Region-South IH
Project: AL ANG04072801
Lab Order: 04080900

CASE NARRATIVE

Sample Cooler Receipt Non-Conformance:

Chain of Custody is not signed when relinquished.



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 09, 2004

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: ALANG04072801

Order No.: 0408090

Dear

Non-Responsive

Analytical Environmental Services, Inc. received 8 samples on 8/3/2004 1:33:00 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 06/01/04-04/30/05.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 02/01/07.

These results relate only to the items tested. This report may only be reproduced in full and contains 5 total pages (including cover letter).

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

Sincerely,

Non-Responsive

Project Manager Supervisor

030 m/m 3

Non-Responsive

$$480 - 69 = 411$$

$$E = [0.00698 \times 69 = 0.48162] + [0 \times 411 = 0] \quad 0.48162 + 0 = 0.48162 \div 480$$

Non-Responsive

$$* [0.0010033$$

$$E = [0.00329 \times 74 = 0.24346] + [0 \times 406 = 0] \quad 0.24346 + 0 = 0.24346 \div 480$$

Non-Responsive

$$* 0.0005072$$

$$E = [0.00294 \times 74 = 0.21756] + [0 \times 406 = 0] \quad 0.21756 + 0 = 0.21756 \div 480$$

Non-Responsive

$$0.0004532$$

$$E = [0.00454 \times 75 = 0.3405] + [0 \times 405 = 0] \quad 0.3405 + 0 = 0.3405 \div 480$$

Non-Responsive

$$0.0007093$$

$$E = [0.00575 \times 76 = 0.43472] + [0 \times 404 = 0] \quad 0.43472 + 0 = 0.43472 \div 480$$

Non-Responsive

$$0.0009056$$

$$E = [0.00137 \times 167 = 0.22879] + [0 \times 313 = 0] \quad 0.22879 + 0 = 0.22879 \div 480$$

Non-Responsive

$$0.0004766$$

$$E = [0.00834 \times 55 = 0.4587] + [0 \times 425 = 0] \quad 0.4587 + 0 = 0.4587 \div 480$$

Non-Responsive

$$0.0009556$$

$$E = [0.00511 \times 56 = 0.28616] + [0 \times 424 = 0] \quad 0.28616 + 0 = 0.28616 \div 480$$

Non-Responsive

$$0.0005961$$

$$E = [0.0124 \times 48 = 0.5952] + [0 \times 432 = 0] \quad 0.5952 + 0 = 0.5952 \div 480$$

Non-Responsive

$$0.00124$$

$$E = [0.0123 \times 48 = 0.5904] + [0 \times 432 = 0] \quad 0.5904 + 0 = 0.5904 \div 480$$

Non-Responsive

$$0.00123$$

$$E = [0.00738 \times 45 = 0.3321] + [0 \times 435 = 0] \quad 0.3321 + 0 = 0.3321 \div 480$$

Non-Responsive

$$0.0006918$$

$$E = [0.00829 \times 40 = 0.3316] + [0 \times 440 = 0] \quad 0.3316 + 0 = 0.3316 \div 480$$

Non-Responsive

$$0.0006908$$

$$E = [0.00807 \times 40 = 0.3228] + [0 \times 440 = 0] \quad 0.3228 + 0 = 0.3228 \div 480$$

$$0.0006725$$

GENERAL AREA 6A = BEHIND STATION #1

$$GA [0.0068 \times 159 = 1.06212] + [0 \times 321 = 0] 1.06212 + 0 = 1.06212 \div 480$$

$$0.0022127$$

GENERAL AREA 9A BEHIND STATION #5

$$GA.00111 \times 166 = 0.18426] + [0 \times 314 = 0] 0.18426 + 0 = 0.18426 \div 480$$

$$0.0003838$$

GENERAL AREA 11A Out in other Room with Bathroom

$$GA 0.00540 \times 154 = 0.8316] + 0 \times 326 = 0 [0.0054 + 0 = 0.00540 \div 480$$

$$0.0000112$$

$$E = C_T + C_T \quad \text{BEST AVAILABLE COPY} \quad 1510.1001$$

$$E = .00698 \times 69$$

$$E = .00698 \times 69 + 0 \times 411$$

LEAD 0.05 $\mu\text{S}/\text{m}^3$

$$E =$$

Non-Responsive

Total Time	mg/m^3	0.05 mg/m^3 TWA Lead
480 - 69 min = 411	0.00698	= 0.0010033
480 - 74 min = 406	0.00329	0.0005072
480 - 74 min = 406	0.00295	0.0004532
480 - 75 min = 405	0.00454	0.0007093
480 - 76 min = 404	0.00592	0.0009056
480 - 167 min = 313	0.00137	0.0004766
80 - 55 min = 425	0.00834	0.0009556
80 - 56 min = 424	0.00511	0.0005961
80 - 48 min = 432	0.0124	0.00124
80 - 48 min = 432	0.0123	0.00123
80 - 45 min = 435	0.00738	0.0006918
80 - 40 min = 440	0.00829	0.0006908
80 - 40 min = 440	0.00867	0.0006725

INDUSTRIAL HYGIENE AIR SAMPLE DATA

BEST AVAILABLE COPY

6408089

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

Return Address (complete address including Zip Code)

Non-Responsive

NGB/TH

510 Plaza Drive, Suite 1530

College Park, GA 30349

Point of Contact (name/AUTOVON)

Non-Responsive

104559-4174

Associated Bulk Samples

☐ Yes ☒ No

Bulk Sample No(s):

Samples Collected By

Non-Responsive

Date Collected

28 July 04

Date Shipped

Project Number

AL-ARNG-04072802

Sampled Installation

Fort George G. Walker

ARLOC

☐ ☐ ☐ ☐ ☐

Location (BLDG/AREA)

Armory -1750

Description of Operation (details on reverse)

TEST FIRING

Method of Collection

☐ Persons Exposed ☐ Hrs/Day

SKC Ames 37mm 300 Cass D84 MCE

Associated Complaints (be specific) (state NONE if applicable)

Analysis Desired

Sampling Data

Sample No.	9MA	10MA	11MA	12MA	13-MA	14-MA	15MA	22B
Pump No.	537996	672222	672223	672204	560809	537638	537711	
Time On	0829	0850	0835		0930	0931	0931	
Time Off	1115	1107	1109		1017	1026	1025	
Total Time (min)	166	167	154		47	55	56	
Flow Rate (LPM)	2L	2L	2L		2L	2L	2L	
Volume (Liters)	332	334	308		94	110	112	
GA/BZ	GA	BZ	GA		BZ	BZ	BZ	
Employee Name/ID		D2027			K0263	53177	E4089	
Laboratory No.								

Results

Comments to Lab:

Lab Use Only

Analyst (initials)

Reviewed By (initials)

Date Received

Date Dispatched

AEHA Form 9-R 1 Oct 84

Rec'd

Non-Responsive

uses AEHA Form 9-R 1 Oct 84 which is obsolete

8/31/04 1:33 pm

Requested Record #J-15-0085 (AL)

Released by National Guard Bureau

Page 393 of 759

Calibration Information

Pump No.	Calibration (L/min)		Rotometer Setting	Date
	Pre-Use	Post-Use		
672222	2028	1958		
672223	2029	1906		
672204	2064	2053		
5103130	2036	2045		
537796	2118	2139		

Name of Calibrator

Operation

Source of Contaminant:

Operation Employee(s) Perform:

Ventilation:

☐

Local Exhaust

☐

General Area

☐

None

Personal Protective Equipment (check if worn)

- ☐ Respiratory Protective Equipment Type: _____
- ☐ Protective Clothing Type: _____
- ☐ Gloves Type: _____
- ☒ Goggles/Face Shield
- ☒ Ear Protection
- ☐ Other: _____

Field Notes/Additional Comments

Non-Responsive

Last Group cleanup

BEST AVAILABLE COPY
Analytical Results

for

National Guard Bureau Region-South III

WorkOrder: 0408088

Client Reference: A1 ARAG004072802

Analyte	Concentration			Limit of Detection (ug)	Qual	Test Method	Date Analyzed / Analyst
	(ug)	(mg/m³)	(ppm)				
Client ID: 96A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 132	
Lead	0.367	0.00111	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 106A	Lab ID: 002A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 131	
Lead	0.456	0.00137	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 116A	Lab ID: 003A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 108	
Lead	1.66	0.00540	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 126A	Lab ID: 004A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): NA	
Lead	<0.200	--	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 136A	Lab ID: 005A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 94	
Lead	0.759	0.00232	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 146A	Lab ID: 006A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 110	
Lead	0.917	0.00284	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 156A	Lab ID: 007A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 112	
Lead	0.572	0.00171	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 168	Lab ID: 008A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): NA	
Lead	<0.200	--	--	0.2	NIOSH 7300	08/04/2004	CDW

081 Analysis indicates possible breakthrough, back section result is greater than 1/10 of the front section result.

General Notes:

-- Less than the indicated Limit of Detection (LOD).

-- Information not available or not applicable.

Back sections were checked and showed no significant breakthrough.

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client: GA NGBWork Order Number 0406089Checklist completed by Almat Ge 8/14
Signature DateCarrier name FedEx ☐ UPS ☐ Courier ☐ Cheas ☐ 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 ☒Containers Temp Blank temperature in compliance* (4°C ± 2)° 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 CUC? Yes ☐ No ☒Proceed with Standard TAT as per project history? Yes ☒ No ☐ Not ApplicableWater - VOA vials have zero headspace? No VOA vials submitted ☒ Yes ☐ No ☐Water - pH acceptable upon receipt? Yes ☐ No ☐ Not Applicable ☒

Adjusted? _____ Checked by _____

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters

Analytical Environmental Services, Inc.

Date: 09-16g-04

CLIENT: National Guard Bureau Region-South III

Project: ALARNG00072802

Lab Order: 0408089

CASE NARRATIVE

Sample Container Receipt Non-Conformance:

Chain of Custody is not signed when relinquished

INDUSTRIAL HYGIENE AIR SAMPLE DATA

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

Return Address (complete address including Zip Code)

Non-Responsive

GB/H

510 Plaza Drive, Suite 1530
College Park, GA 30349

Non-Responsive

AUTOVON

404554-4174

Associated Bulk Samples

☐ Yes ☒ No

Bulk Sample No(s):

Non-Responsive

Date Collected

28 Jul 04

Date Shipped

Project Number

ALANG 04070803

Sampled Installation

Fort George C. Wallace Armory

ARLOC

☐ ☐ ☐ ☐ ☐

Location (BLDG/AREA)

ALNG Armory 1250

Description of Operation (details on reverse)

SKC Pumps/37mm 3cas. 0.86 MCE

☒ Persons Exposed ☐ Hrs/Day

Method of Collection

Associated Complaints (be specific) (state NONE if applicable)

Analysis Desired

Sampling Data

Sample No.	16-MA	17-MA	18-MA	19-MA	20-MA			21-MA
Pump No.	53784	537341	537534	537711	537638			
Time On	0931	0932	1021	1025	1026			
Time Off	1017	1018	1105	1105	1106			
Total Time (min)	48	48	45	40	40			
Flow Rate (LPM)	2L	2L	2L	2L	2L			
Volume (Liters)	96	96	90	80	80			
GA/BZ	BZ	BZ	BZ	BZ	BZ			
Employee Name/ID	B-81667	D-04320	C-6972	H-0654	S-6489			
Laboratory No.								

Results

Comments to Lab:

Lab Use Only

Analyst (initials)

Reviewed By (initials)

Date Received

Date Dispatched

Non-Responsive

AEHA Form 9, 1 Oct 80 which is obsolete

BEST AVAILABLE COPY
Calibration Information

Pump No.	Calibration (L/min)		Rotometer Setting	Date
	Pre-Use	Post-Use		

Name of Calibrator

Operation

Source of Contaminant:

Operation Employee(s) Perform:

Ventilation:



Local Exhaust



General Area



None

Personal Protective Equipment (check if worn)

- ☐ Respiratory Protective Equipment Type: _____
- ☐ Protective Clothing Type: _____
- ☐ Gloves Type: _____
- ☒ Goggles/Face Shield
- ☒ Ear Protection
- ☐ Other: _____

Field Notes/Additional Comments

Non-Responsive 3rd Group

BEST AVAILABLE COPY
Analytical Results
for

National Guard Bureau Region-South IH
WorkOrder: 0105091
Client Reference: ALARNG04072803

Analyte	Concentration			Limit of Detection (ug)	Quant	Test Method	Date Analyzed Analyst
	(ug)	(mg/m ³)	(ppm)				
Client ID: 16M1A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 96	
Lead	1.19	0.0124	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 17M1A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 96	
Lead	1.18	0.0123	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 18M1A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 96	
Lead	0.865	0.00938	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 19M1A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 80	
Lead	0.663	0.00829	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 20M1A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): 80	
Lead	0.646	0.00807	--	0.2	NIOSH 7300	08/04/2004	CDW
Client ID: 21M1A	Lab ID: 001A	Date Sampled: 7-28-2004		Media: Filter		Air Vol.(L): NA	
Lead	<0.200	--	--	0.2	NIOSH 7300	08/04/2004	CDW

ca) Analysis indicates possible breakthrough; back section result is greater than 1% of the front section result

General Notes:

- Less than the indicated limit of detection (LOD)
- Information not available or not applicable

Back sections were checked and showed no significant breakthrough



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

August 09, 2004

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: ALARNG04072803

Order No.: 0408091

Dear Non-Responsive

Analytical Environmental Services, Inc. received 6 samples on 8/3/2004 1:33:00 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 06/01/04-04/30/05.
- AIHA Certification number 505 for analysis of Air, Paint Chips, Soil and Dust Wipes, effective until 02/01/07.

These results relate only to the items tested. This report may only be reproduced in full and contains 5 total pages (including cover letter).

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

Sincerely,

Non-Responsive

Project Manager Supervisor

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client GANGB Work Order Number 0408091

Checklist completed 8/23/04 Date 8/23/04

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? (4°C±2)* Yes ☒ No ☐

Cooler #1 Unit A 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 ☐

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters.

C:\Documents and Settings\Chemist\Desktop\SampleReceiptChecklistRptREV.rtf

Analytical Environmental Services, Inc.

Date: 09-10-04

CLIENT: National Guard Bureau Region-South III

Project: AL ARNG04072803

Lab Order: 0108091

CASE NARRATIVE

Sample Cooler Receipt Non-Conformance.

Chain of Custody is not signed when relinquished.



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

NGB-ARS-SEIH

14 December 2006

MEMORANDUM THRU COL [Redacted] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SGT [Redacted] Readiness NCO, 2152 South Main St., Goodwater, AL 35702.

SUBJECT: Industrial Hygiene Special of the Goodwater Armory.

1. References.

- a. Report completed 21 December 2006, Industrial Hygiene report for Elba Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

- a. At the request of LTC. [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Goodwater Armory.
 - b. b. [Non-Responsive] of OSHA II conducted the industrial hygiene survey.
3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)
4. Recommendations. **Request an IH survey once this Armory is renovated.**
5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC. [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

Alabama Army National Guard
Goodwater Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: SGT [REDACTED]
Armory Supervisor, 1207th and 1208th Quartermasters and Q.M. Detachment, Goodwater,
Alabama 35072

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of 1207th and 1208th Quartermaster, and Q.M. Detachment, 2153 South Main St.
Goodwater, AL 35072

December 21, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

Oshes II Industrial Hygiene Consulting
III Survey of Goodwater Armory
Alabama

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at 1207th and 1208th Quartermasters and Q.M. Detachment, Goodwater, Alabama.

3. **Background:** 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: 1207th and 1208th Quartermasters and Q.M. Detachment, Goodwater Armory. Two full time individuals perform administrative duties. The armory was undergoing full renovations to transform from armory to Readiness Center. The renovations commenced during August of 2006. New lights are being installed. The indoor firing range had been removed and the debris disposed prior to this survey.



The entire facility was under renovation with the exception of the kitchen.

*Oshea II Industrial Hygiene Consulting
IH Survey of Goodwater Armory
Alabama*



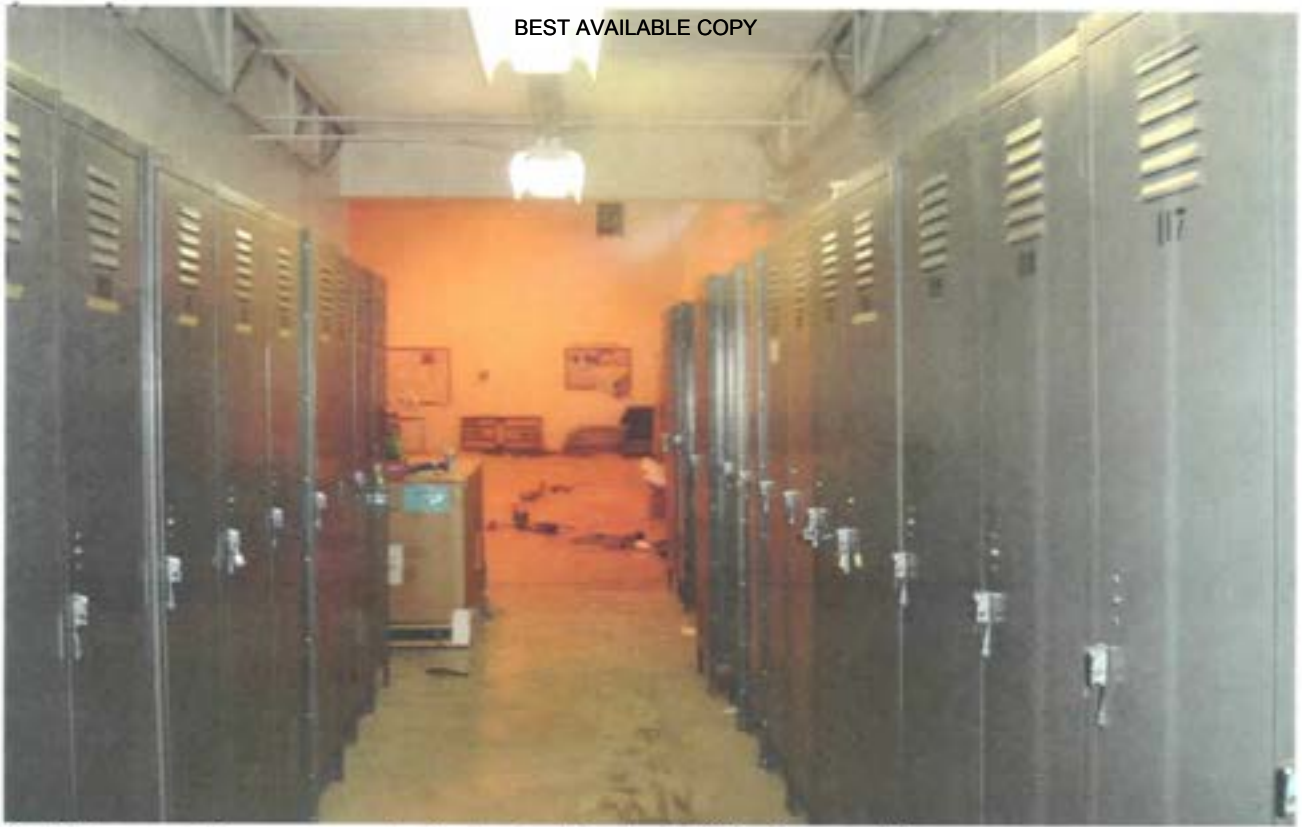
Normal workdays will resume when renovations are complete.



The indoor firing range had been gutted completed.



The bullet stop and its debris had also been removed prior to this survey.



Building supplies were centrally located in the drill hall assembly area.





Administrative areas were being expanded in the readiness center.



New door wells for installation



In the administrative office area phone answering, computer use and paper generation is performed. This was a workable office while renovations were taking place.



The kitchen was not used to prepare food during the week.

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 and evaluated for the armory's inventory.

c. **Illumination:** Illumination levels were recorded in the areas not being renovated with the exception of the drill hall and kitchen. Lighting had not yet been reinstalled in renovating areas. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	77.3----83.2	50---100
Hallways	58.0----64.6	50---100
Kitchen	51.8----52.7	50---100
Admin areas	83.4----78.5	50---100
Drill Hall	39.8----42.3	50---100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

e. **Motor Pool Area:** The motor pool area located behind the armory. Vehicles were used during weekend drills. Armory's personnel perform no maintenance operations or vehicle repairs.

Coshea II Industrial Hygiene Consulting
IH Survey of Coldwater Armory
Alabama



f. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs were posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

g. **Arms Room/Weapons Vault:** Weapons are stored 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.

Wipe sampling: Wipe samples were obtained in the following areas: dusty horizontal surfaces in the assembly/drill hall area, the kitchen and door well of the gutted Indoor firing range. Twenty-four wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. All Sample results were below reading limits (BRL) in the kitchen and drill hall. One sample taken in the door well, Sample No. 91108 revealed 30 Micrograms of lead. This sample was obtained at the top of the door well.

Sample No. 91108	IFR Top of door well	30 Micrograms of lead
Sample No. 91101-91104	Kitchen	BRL Not detected
91105-911010	IFR (door Well)	Sample 91108—30 Micrograms
911011-911024	Drill Hall	BRL Not detected



Door well is to the left facing the old bullet stop.

4. Technical Assistance:

For further assistance concerning this survey, you may contact Mr. [REDACTED] NGB
Regional Industrial Hygienist at 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office

ATTN: LTC [REDACTED]

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office

ATTN: Major [REDACTED]

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

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	1595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625

Enclosure No. 1

DD2214 - Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)							
1. DATE (YYYYMMDD) 2006 / 12 / 08				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</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 Extech		a. MANUFACTURER		a. MANUFACTURER Extech			
b. MODEL 407703	c. SERIAL NO. 041002810	b. MODEL	c. SERIAL NO.	b. MODEL 7703A	c. SERIAL NO. 4XX69		
d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D		d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 05/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>				7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>			
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Goodwater, Armory 2153 South Main St. Goodwater, AL 35072					9. PRIMARY SOURCE OF NOISE Trucks		
					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 (85-105)	c. PLUG AND MUFF (106-115)
Hemmet Cargo	S		88.7			X	
HUMMWV	S		87.5			X	
Hemmet Recovery	S		91.4			X	
5 KW Generators	S		90.0			X	
NOTES: Range of levels noted by f.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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.							
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) All who work in this shop area							
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION							
a. NAME (Last, First, Middle Initial) SGT [REDACTED]		b. TELEPHONE (Include area code) 256-839-6517			c. ORGANIZATION Goodwater Armory		
17. SURVEY PERFORMED BY (Last Name, First Name, MI) <div style="background-color: black; color: red; padding: 2px; display: inline-block;">Non-Responsive</div>					18. HEARING CONSERVATION MONITOR (Last Name, First Name, MI)		

DD FORM 2214, JAN 2000

PREVIOUS EDITION MAY BE USED

Hazardous Material inventory

Scouring powder
Bleach
Glass cleaner
Disinfecting spray
Air freshener
Laundry detergent
Liquid hand soap

Enclosure No. 3

Laboratory Analysis

Enclosure No 4

Full Time Personnel

SSC
SGT



Enclosure No. 5

BEST AVAILABLE COPY

HHIM

Enclosure No.6

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC 01000

INSTALLATION AARNG

BLDG _____

ROOM _____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
AA	ADO	YR 06/ 12/08	KJS	NG
SUPERVISOR		ORGANIZATION		
SSG [REDACTED]		Alamo Armory Signal Net Support Brigade		
PH NO.		COMMERICAL/DSN	FREQUENCY	# CIV #MIL #CONTRACT # LOC
334-588-3222		x /	6-8 hours/ day	3 /
LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	1	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE	REQUIRED	UTILIZED		RESPIRATOR	R U	EYES/FACE	R U
GLOVES	R U			AIRLINE	 	CHEM/SPLASH	
ACID				ABRASIVE BLASTING HOOD	 	FULL FACE SHIELD	
COLD SURFACE				DISPOSABLE	 	CHEM/SAF IMPACT	x/x
HOT SURFACE				FULL FACE AIR PURIFYING	 	SAFETY IMPACT	
NBC AGENTS				1/2 FACE AIR PURIFYING	 	WELDING HELMET	
OIL				POWERED AIR PURIFYING	 	WELDING GOGGLES	
SOLVENTS				1/4 FACE AIR PURIFYING	 	LASER EYE PROTECT	
SURGICAL GLOVES				SCBA	 	OTHER	
OTHER							
EARS/ HEARING	R U	BODY	R U	HEAD AND FEET	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	POnoiseeco	2	0	Noise, continuous
POFOOTHAZ	POfstress	3	0	Mental / physical stress
POFLYPROJ	POLifting	3	D	Heavy lifting
POEYHAZA	PQeyehaza	2	A	Eye Hazards
POFLAMHAZ				
POLIFTING				
POSHARPBJE				
POELSHOCK				
COLUBEOIL				

DESCRIBED OPERATION

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

PERSONNEL LIST ATTACHED

Facility layout



A new layout will be provided at the next survey due to renovations the previous floor plan has changed.

Enclosure No.7



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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COL [Non-Responsive] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC [Non-Responsive] Facility Supervisor, 3550 Creek Path Road, Guntersville, AL 35976.

SUBJECT: Industrial Hygiene Survey of the Guntersville Armory.

1. References.

a. Report completed 21 February 2007, Industrial Hygiene report for the Guntersville Armory.

b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.

c. AR 40-5, Preventive Medicine, 22 July 2005.

d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.

e. AR 385-10, 29 February 2000, Army Safety Program.

f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.

g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.

h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.

i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the Guntersville Armory.

b. Ms. [Non-Responsive] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Discuss the high lead samples taken inside of the inactive indoor firing range converted into a Field Maintenance Shop (FMS) with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 1)

b. Discontinue all maintenance in the converted facility until the deactivated indoor firing range has been completely cleaned and properly renovated.

c. Follow the remainder of the contractor's recommendations on page 5 of the contractors report.

d. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ. [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

21 February 2007

MEMORANDUM FOR: Guntersville Armory, ATTN: SFC [REDACTED] 3550 Creek Path Road,
Guntersville, Alabama 35976

SUBJECT: Industrial Hygiene Survey of Guntersville National Guard Armory, Guntersville,
Alabama

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 Guntersville National Guard Armory, Guntersville, Alabama

2. 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 the Guntersville National Guard Armory, Guntersville, Alabama on 14 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory. The building was visually examined and employees were interviewed for data related to the building and the operations performed. The illumination was measured and lead wipe samples were taken in various areas of the Armory.

3. Facility Description. This facility currently houses one unit. The facility houses administrative areas, one Supply Room, an Arms room, a drill hall and a deactivated indoor firing range currently being used as a FMS shop.

4. Findings.

a. The deactivated indoor firing range is converted into a Field Maintenance Shop (FMS). FMS #3, from Cullman converted the range into an annex FMS shop to facilitate vehicle maintenance. The shop is used by technicians from the Cullman office and is used during drill weekends by the unit. A wooden wall near the pit divides the space. A desk is located along the wall on the maintenance side. The backstop side is utilized as a storage area. An overhead garage door provides access for vehicles. A tailpipe exhaust system is not available in the range. Carbon Monoxide monitors are not available. The range backstop, target retrievers, and all items associated with a fire range have been removed. Sand is located in the pit.

b. Illumination was surveyed throughout the building. A diagram of illumination measurements can be found within the enclosure of this report. The areas listed below are below the standards required in reference f. The findings are as followed in Foot-candles (FC):

Table 1

AREA/LOCATION	MEASURED FC	REQUIRED FC
Supply	8.9-30.6	20-30
Classroom #2	38.9	50-75
Dispatch office	5.2	50-75
Platoon office	34.9	50-75
Orderly room	26.1-50.9	50-75

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

Page 2

SUBJECT: Industrial Hygiene Survey of Guntersville National Guard Armory, Guntersville, Alabama

c. Twelve Lead wipe samples and one blank were taken in various locations throughout the deactivated range and the Armory. One bulk sand sample was obtained from the range pit. Sample locations and results are in the table 2 below.

Table 2

Sample #	Location	Results
1	Backstop left side 7ft up	6988 ug/ft ²
2	Backstop Right side 7ft up	689 ug/ft ²
3	Floor 1ft in front of pit	10400 ug/ft ²
4	Green locker #3 in storage area of range	199 ug/ft ²
5	Floor rt. Side 4 ft from light box	30 ug/ft ²
6	Wall right side 4ft up, across from #6 locker	189 ug/ft ²
7	Floor 3 ft outside range	26 ug/ft ²
8	Top of white refrigerator in kitchen	BRL
9	Top of upper cabinet left side in kitchen	BRL
10	Floor, 1 ft from supply room door	BRL
11	Top of solvent tank	40 ug/ft ²
12	Drill hall floor	BRL
Bulk 1	Sand from range Pit	51400 mg/kg
Blank	Blank	BRL

*BRL indicates below reporting limits

d. Stained ceiling tiles were noticed in the Readiness NCO's office, Orderly room, and the classrooms. The facility received a total re-roofing during the summer of 2006. A history of leaking occurred 2003-2005.

e. Two solvent tank manufactured by Rams Environmental Technologies is located in the Drill Hall. A Material Safety Data Sheet (MSDS) for the solvent was not available. The solvent is used for weapons cleaning

f. A 2.5 ton truck, a HUMVEE, and a pickup truck are stored in the Drill Hall. Technicians states that vehicle maintenance is not being performed in the drill hall. The vehicles have items from a recent drill stored in them.

SUBJECT: Industrial Hygiene Survey of Guntersville National Guard Armory, Guntersville, Alabama

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Non-Responsive

LAE Consulting

5 Encl

1. Building Diagram
 2. HHIM
 3. Facility Photos
 4. Laboratory Results
 5. MSDS
- CF: Alabama

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

Page 4

SUBJECT: Industrial Hygiene Survey of Guntersville National Guard Armory, Guntersville, Alabama

6. Recommendations.

a. Recommend that facility personnel discontinue all vehicle maintenance activity in the range until guidance and/or written permission from the state Occupational health office and the Facility engineering office is provided. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.

(RAC 2)

b. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If monies are available, recommend upgrading the lighting fixtures to meet the recommended requirements.

(RAC 3)

c. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.

(RAC 2)

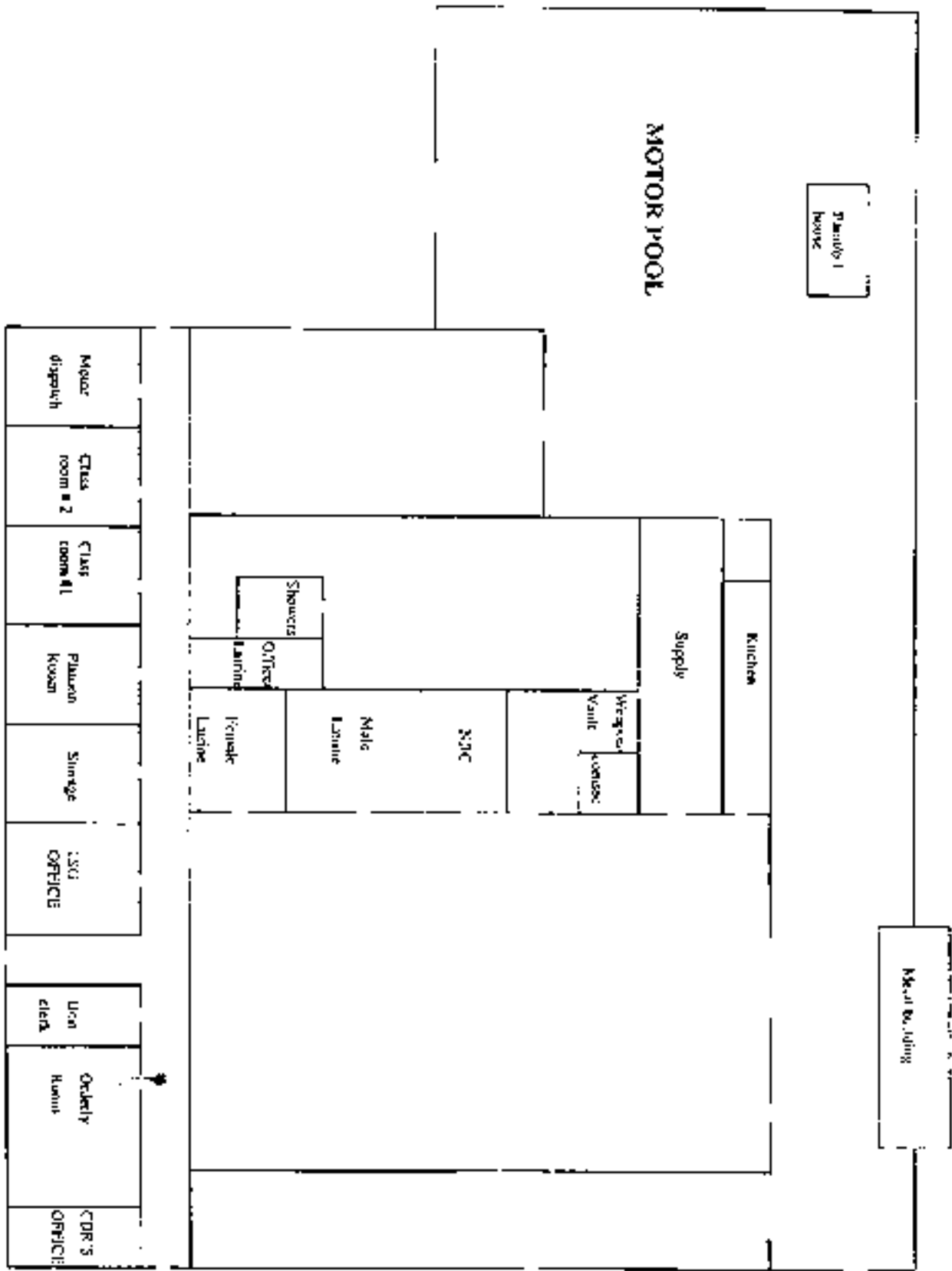
d. Remove and replace all stained ceiling tiles. **(RAC 3)**

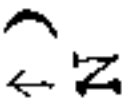
e. Acquire and post the MSDS for the solvent near the solvent tank. Ensure all personnel follow manufacture's recommendations when using the product. Ensure Personal Protective Equipment (PPE) appropriate for the solvent is provided and the wear is enforced. Contact the state Occupational Health office for assist in obtaining the correct PPE for the solvent. **(RAC 2)**

f. Discourage any vehicle maintenance in the drill hall. Ensure overhead garage doors are opened before starting any vehicle in the drill hall. **(RAC 4)**

U.S. GPO: 1975-0-250-000
1215 Second Street, NE, Washington, D.C. 20002
Telephone: (202) 512-2400

Page 5







ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 27, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717

FAX: (410) 551-7215

RE: GUNTERSVILLE ARMORY

Order No.: 0702B59

Dear Non-Responsive

Analytical Environmental Services, Inc. received 13 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.
- AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

These results relate only to the items tested. This report may only be reproduced in full and contains 6 total pages (including cover letter).

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

Sincerely,

Non-Responsive

Director of Project Management

[illegible]

Analytical Environmental Services, Inc.

Sample Cooler Receipt Checklist

Client L/E ConsultingWork Order Number 0124654Checklist completed by JH/6 wk
SignatureDate 1/2/01Carrier name: FedEx ☐ UPS ☐ Courier ☐ Chem ☐ U.S. Mail ☒ Other ☐Shipping container/cooler in good condition? Yes ☒ No ☐ Not PresentCustody 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? ^{yes 2/2/01} ~~44°C+2°~~ Yes ☒ No ☐Cooler #1 11/16 by 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 AHA lead) Is a known blank included? Yes ☒ No ☒ ^{yes 1/2/01}

See Case Narrative for resolution of the Non-Conformance.

* Samples do not have to comply with the given range for certain parameters

C:\Documents and Settings\Chemist\Desktop\CHECKLIST.rtf

Analytical Environmental Services, Inc.

Date: 27-Feb-07

CLIENT: LAE Consulting
Project: GUNTERSVILLE ARMORY
Lab Order: 0702B59

CASE NARRATIVE

The COC was not signed when it was relinquished.

The collection date was not listed on the sample containers.

Samples should be analyzed for Lead per Non Responsive on 2/22/07.

Analytical Environmental Services, Inc.

Date: 2/27/2007

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: LAE Consulting
 Project: GUNTERSVILLE ARMORY
 Delivery Order:
 PO No:

Lab Order: 0702B59
 Date Received: 2/21/2007 12:40 PM
 Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0702B59-001A	BLANK	BRL	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-002A	Pb1	6980	µg/L ²	225	11.38	2/14/2007	2/26/2007	JY
0702B59-003A	Pb2	689	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-004A	Pb3	10400	µg/L ²	280	13.99	2/14/2007	2/26/2007	JY
0702B59-005A	Pb4	199	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-006A	Pb5	30	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-007A	Pb6	189	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-008A	Pb7	26	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-009A	Pb8	BRL	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-010A	Pb9	BRL	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-011A	Pb10	BRL	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-012A	Pb11	40	µg/L ²	20	1	2/14/2007	2/26/2007	JY
0702B59-013A	Pb12	BRL	µg/L ²	20	1	2/14/2007	2/26/2007	JY

Analyst: BRL Not Detected at the Reporting Limit

DE - Detection Limit

Results are blank corrected where applicable

Page 1 of 1

Analytical Environmental Services, Inc.

Date: 27-Feb-07

CLIENT: LAE Consulting

Work Order: 0702BS9

Project: GUNTERSVILLE ARMORY

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPE_MET_AA

Sample ID MB-83162	Sample type MBLK	TestCode WIPE_MET_AA	Units ug, Total	Prep Date 2/24/2007	RunNo 98835						
Client ID	Batch ID 83162	TestNo N7082		Analysis Date 2/26/2007	SeqNo 2002908						
Analyte	Result	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead	BRL	20.0									

Sample ID: LCS-83162	Sample type LCS	TestCode: WIPE_MET_A	Units ug, Total	Prep Date 2/24/2007	RunNo: 99835						
Client ID	Batch ID 83162	TestNo: N7082		Analysis Date 2/26/2007	SeqNo 2002910						
Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Lead		1102	43.8	857	0	115	80	120	0	0	

Sample ID	LCS0-83162	SampleType	LCS0	TestCode	WIPE_MET_A	Units	µg, Total	Prep Date	2/24/2007	RunNo	89835		
Client ID		Batch ID	83162	TestNo	N7082			Analysis Date	2/26/2007	SeqNo	2002911		
Analyte		Result	1048	PQL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPDLimit	Qual
Lead					416	957	0	110	80	120	1102	4.97	25

H Analyte detected in the associated Method filter.
 II Holding times for preparation or analysis exceeded.
 R RPD outside accepted recovery limits.
 SRI Below Reporting Limit.
 F Analyte detected below quantitation limits.
 N Spike Recovery outside accepted recovery limits.
 Z Value above quantitation range.
 N Analyte not NCLAL certified.

Analytical Environmental Services, Inc.

Date: 26-Feb-07

CLIENT: LAE Consulting
 Lab Order: 0702B60
 Project: Alabama
 Lab ID: 0702B60-001A

Client Sample ID: BUT.K GUNTERSVILLE PbI
 Tag Number:
 Collection Date: 2/15/2007
 Matrix: SOIL

Analyses	Result	Limit	Qual	Units	BatchID	DF	Date Analyzed
METALS, TOTAL		SW6010B		(SW3050B)			Analyst: BB
Lead	51400	503		mg/Kg-dry	83025	100	2/26/2007 11:50:42 AM
PERCENT MOISTURE		D2216					Analyst: CG
Percent Moisture	2.24	0		wt%		1	2/23/2007 1:20:00 PM

Qualifiers:

* Value exceeds Maximum Contaminant Level
 URL Below Reporting Limit
 H Holding times for preparation or analysis exceeded
 N Analyte not NELAP certified
 Rpt Limit Reporting Limit

3E Analyte detected in the associated Method Blank
 E Value above quantitation range
 J Analyte detected below quantitation limits
 P NELAP analyte certification pending
 S Spike Recovery outside accepted recovery limits

Page 1 of 3



ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 26, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717
FAX (410) 551-7215

RE: Alabama

Order No.: 0702B60

Dear

Non-Responsive

Analytical Environmental Services, Inc. received 3 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.
- AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

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

Director of Project Management

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Client Life ConsultingWork Order Number 0702 BWDChecklist completed by M. Jensen Date 2/2/07Carrier name FedEx UPS Courier Chert US Mail OtherShipping container/cooler in good condition? Yes ✓ No Not PresentCustody seals intact on shipping container/cooler? Yes Not Present ✓Custody seals intact on sample bottles? Yes Not Present ✓Container Temp Blank temperature in compliance? ^{mg 2/2/07} ~~(40°F-75°F)~~ Yes ✓ No Not PresentCooler #1 Amey Cooler #2 Amey Cooler #3 Amey Cooler #4 Amey Cooler #5 Amey Cooler #6 AmeyChain of custody present? Yes ✓ No Not PresentChain of custody signed when relinquished and received? Yes Not Present ✓Chain of custody agrees with sample labels? Yes ✓ No Not PresentSamples in proper container/bottle? Yes ✓ No Not PresentSample containers intact? Yes ✓ No Not PresentSufficient sample volume for indicated test? Yes ✓ No Not PresentAll samples received within holding time? Yes ✓ No Not PresentWas TAT marked on the C/C? Yes ✓ No Not PresentProceed with Standard TAT as per project history? Yes Not Present No Not Applicable ✓Water - VOA vials have zero headspace? No VOA vials submitted ✓ Yes Not PresentWater - pH acceptable upon receipt? Yes Not Present No Not Applicable ✓Adjusted? Not Present Checked by Not PresentSample Condition: Good ✓ Other(Explain) Not Present(For diffusive samples or AIIA lead) Is a known blank included? Yes Not Present No ✓

See Case Narrative for resolution of the Non-Conformance

* Samples do not have to comply with the given range for certain parameters

C:\Documents and Settings\Chemist\Desktop\CHECKLIST.inf

Date: 26-Feb-07

Analytical Environmental Services, Inc.

CLIENT: LAE Consulting
Project: Alabama
Lab Order: 0702B60

CASE NARRATIVE

The COC was not signed when it was relinquished.

A project name was not provided on the COC. Project Name "Alabama" will be used per Lisa Evans on 2/22/07.

Samples should be analyzed for Lead per Non-Responsive on 2/22/07.

Analytical Environmental Services, Inc.

CLIENT: LAF Consulting

Work Order: 0702B09

Project: Alabama

Date: 26-Feb-07

ANALYTICAL QC SUMMARY REPORT

TestCode: 6010B_S

Sample ID	MB-83025	Sample Type	MBLK	TestCode	6010B_S	Units	mg/Kg	Prep Date	2/22/2007	RunNo	98742
Client ID	83025	Batch ID	83025	TestNo	SW8010B			Analysis Date	2/23/2007	SeqNo	2001051
Result		PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead		BRL	5.00								
Sample ID	LCS-83025	Sample Type	LCS	TestCode	6010B_S	Units	mg/Kg	Prep Date	2/22/2007	RunNo	98742
Client ID	83025	Batch ID	83025	TestNo	SW8010B			Analysis Date	2/23/2007	SeqNo	2001049
Result		PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead		49.98	5.00	50	0	0	80	120	0	0	
Sample ID	0702B09-002AMS	Sample Type	MS	TestCode	6010B_S	Units	mg/Kg-dry	Prep Date	2/22/2007	RunNo	98742
Client ID	83025	Batch ID	83025	TestNo	SW8010B			Analysis Date	2/23/2007	SeqNo	2001055
Result		PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead		57.42	5.40	53.98	10.32	0	75	125	0	0	
Sample ID	0702B09-002AMS	Sample Type	MSD	TestCode	6010B_S	Units	mg/Kg-dry	Prep Date	2/22/2007	RunNo	98742
Client ID	83025	Batch ID	83025	TestNo	SW8010B			Analysis Date	2/23/2007	SeqNo	2001052
Result		PQL	SPK value	SPK Ref Val	%REC	Low Limit	High Limit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead		57.42	5.41	54	10.32	0	87	125	57.42	0.033	20

Qualifiers: B Analyte detected in the associated Method Blank
 H Holding time for preparation of analysis exceeded
 X RPD outside accepted recovery limits

E Value above quantization range
 N Analyte not NPLAL certified



Guntersville Armory, Guntersville, Alabama



View of water stained ceiling tiles



View of heavily stained ceiling tiles in the readiness NCO office



View of drill hall used for vehicle storage



View of converted range's with sand in the pit.



Down range view of the converted indoor firing range



Down range view of the converted range



View of two solvent tanks used for weapons cleaning located on the drill hall floor



Lead wipe sample 1, located on the left side of the backstop



Lead wipe sample 2, located on the floor in front of the pit



Lead wipe sample 5, located on the floor right side near light box in range



View of Lead wipe sample 4, located on green locker #5 in range



Lead wipe sample 5, located on the floor right side near light box in range



Lead wipe sample 6, located on the right wall across from locker #6



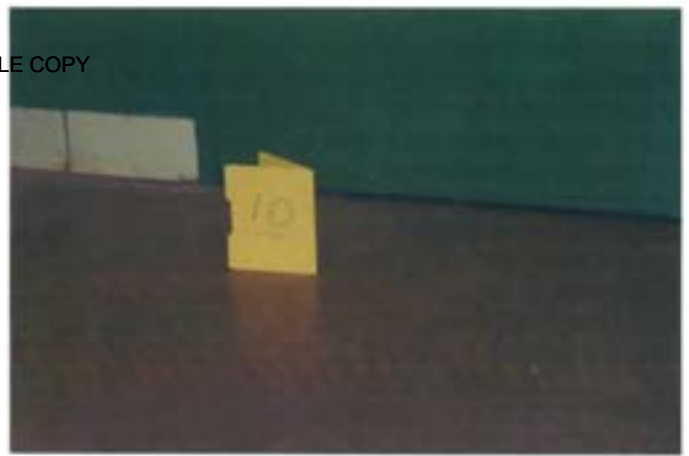
Lead wipe sample 7, located on the floor outside range door



Lead wipe sample 8, located on top of the refrigerator in the kitchen



Lead wipe sample 9, located on top of kitchen cabinet



Lead wipe sample 10, located on the floor in front of the supply room



Lead wipe sample 11, located on top of the solvent tank located in the drill hall



Lead wipe sample 12, located on the drill hall floor

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

AR/LOC 01000		INSTALLATION GUNTERSVILLE ARMORY		BLDG/RM NO. 3550 CREEK PATH ROAD GUNTERSVILLE, ALABAMA 35976	
LOCATION/CODE AA			OPERATION/CODE ADO		
SURVEY DATE 14 FEB 07		EVALUATOR LAE CONSULTING			
MACOM/CODE NG		SUBMACOM/CODE XX		SUPERVISOR SFC [REDACTED]	
TELEPHONE/DSN NO. 256.582.3602		UNIT/ORGANIZATION GUNTERSVILLE ARMORY		RAC 4	FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER 2	

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
CONTROLLING	5.2-90.8	FC	50-100	UNACOMM

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

GLOVES	R/U	RESPIRATOR	NIOSH TC NO.	MANUFACTURER	R/U
ACID	/	AIR LINE			/
COLD SURFACES	/	ABRASIVE BLASTING HOOD			/
HOT SURFACES	/	DISPOSABLE			/
HSC 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	X/	CANAL CAPS	/	APRONS	X/	COLD WEATHER BOOTS/HATS	/
FULL FACE SHIELD	/	EARPLUGS	X/	COLD WEATHER CLOTHING	/	HARD HATS	/
CHEMICAL/SAFETY	X/	HELMETS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SAFETY/IMPACT	X/	MUFFS	X	FULL BODY SUIT	/	SAFETY/CONDUCTIVE SHOES	/
WELDING HELMET	/	MUFF/EARPLUG COMBO	/	HEAT REFLECTIVE VEST/SUIT	/	SAFETY/NCN-CONDUCTIVE SHOES	X/
		MUFF/EARPLUG W/TIME LIMIT	/	SAFETY BELT/HARNES	/		/

[illegible][illegible]

SECTION 6: COMMENTS	
<input type="checkbox"/> No comments	<input type="checkbox"/> See attached sheet

□ See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

AKLOC 01000	INSTALLATION GUNTERSVILLE ARMORY	BLDG/RM NO. 3550 CREEK PATH ROAD GUNTERSVILLE, ALABAMA 35976
LOCATION/CODE SA	OPERATION/CODE SAH	
SURVEY DATE 14 FEB 07	EVALUATOR LAE CONSULTING	
MACOM/CODE NG	SUBMACOM/CODE	SUPERVISOR SFC [REDACTED]
TELEPHONE/DSN NO. 256.582.3602	UNIT/ORGANIZATION GUNTERSVILLE ARMORY	RAC 4 FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS
		NO. LOC(S)
		NO. OTHER 2

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
TING	30.6	FC	50-100	ACOMM

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	X/	CANAL CAPS	/	APRONS	X/	COLD WEATHER BOOTS/MATS	/
FULL FACE SHIELD	/	EARPLUGS	X/	COLD WEATHER CLOTHING	/	HARD HATS	/
CHEMICAL/SAFETY	X/	HELMETS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SAFETY/IMPACT	X/	MUFFS	X	FULL BODY SUIT	/	SAFETY/CONDUCTIVE SHOES	/
WELDING HELMET	/	MUFF/EARPLUG COMBO	/	HEAT REFLECTIVE VEST/SUIT	/	SAFETY/NCN CONDUCTIVE SHOES	X/
		MUFF/EARPLUG W/TIME LIMIT	/	SAFETY BELT/HARNES	/		/

[illegible][illegible]

SECTION 6: COMMENTS

☐ No comments ☐ See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

AKLOC 01000		INSTALLATION GUNTERSVILLE ARMORY		BLDG/RM NO. 3550 CREEK PATH ROAD GUNTERSVILLE, ALABAMA 35976	
LOCATION/CODE MN			OPERATION/CODE TAT		
SURVEY DATE 14 FEB 07			EVALUATOR LAE CONSULTING		
MACOM/CODE NG		SUBMACOM/CODE		SUPERVISOR SFC [REDACTED]	
TELEPHONE/DSN NO. 256.582.3602		UNIT/ORGANIZATION GUNTERSVILLE ARMORY		RAC 4	FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER 2	

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
TING	6.7-91	FC	50-100	UNACOMM

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

SECTION 4: HAZARD INVENTORY DATA

[illegible]

SECTION 5: PERSONNEL DATA

[illegible]

SECTION 6: COMMENTS

u No comments

3 See attached sheet



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

NGB-ARS-SEIH

14 December 2006

MEMORANDUM THRU COL [Non-Responsive] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC [Non-Responsive] Readiness NCO, 800 West Main Street, Hartford, Alabama 36344.

SUBJECT: Industrial Hygiene Special of the Hartford Armory.

1. References.

- a. Report completed 5 December 2006, Industrial Hygiene report for Hartford Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Hartford Armory.

b. [Non-Responsive] of OSHA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

b. **Hazardous communication or HAZCOM refresher training.** Continue with annual HAZCOM training. Dated and signed records should be maintained of all HAZCOM training administered.

c. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin. RAC 3, AR 40-5

d. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non- functioning light fixtures.

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. RAC 3 AR 40-5

f. **Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.**

g. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

BEST AVAILABLE COPY

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ **Non-Responsive** Alabama State Safety and
Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC **Non-Responsive** Alabama State Safety and
Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

BEST AVAILABLE COPY

Alabama Army National Guard
Hartford Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: SFC [REDACTED]
Armory Supervisor, Bravo Company 131 Armor Battalion, Hartford, Alabama 36344

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module (HHIM)
Survey of Bravo Company 131 Armor Battalion, 800 West Main St. Hartford, Al 36344

November 24, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

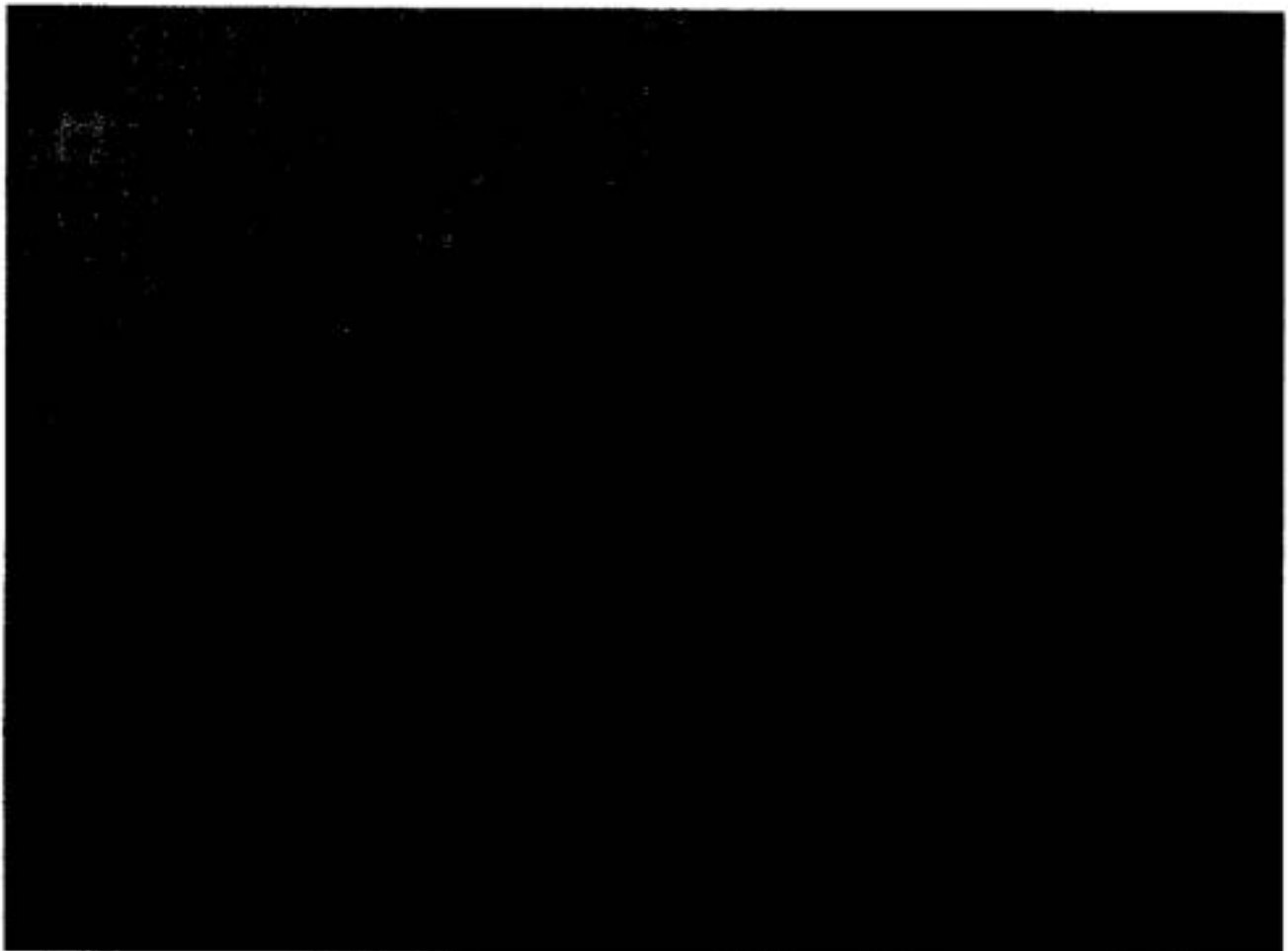
Oshea II Industrial Hygiene Consulting
IH Survey Hartford Amory
Nov 2006

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at Bravo Company 131 Armor Battalion, Hartford, Alabama.

3. **Background:** 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: Bravo Company 131 Armor Battalion is housed in the Hartford Armory. Three full time individuals perform administrative duties. The armory was constructed in 1954 and is approximately 12,834 square feet. It contains several offices/five administrative areas, one combined kitchen/mess hall, supply rooms, weapons room/vault and an indoor firing range. The armory was well kept and there was some evidence of previous leaks. It was stated that a portion of the roof had been repaired. Ceiling and floor tile was intact with no visible signs of friability. In some of the administrative offices bulbs were blown or not functioning



The drill hall contained a tiled floor.



In the administrative office area of the armory phone answering, computer use and paper generation is performed.



Supervisor's Office



The kitchen is not used to prepare food.

Indoor firing range: It was stated that it had never been used. Wipe sampling was performed and the results addressed later in the report. The bullet stop is shown in the photograph below



The firing range was used for storage.

Oshea II Industrial Hygiene Consulting
IH Survey Hartford Amory
Nov 2006

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 and evaluated for the armory's inventory.

c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	35.2-----77.4	50---100
Readiness NCO	28.9-----32.7	50---100
Hallways	48.3-----50.3	50---100
Kitchen	47.8-----52.2	50---100
Admin areas	59.7-----68.5	50---100
Firing range	37.5-----39.7	5-----10
Orderly room	23.7-----24.2	50---100
Drill Hall	20.8-----22.5	50---100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

Wipe sampling: Wipe samples were obtained in the following areas : the bullet backstop of the firing range, dusty horizontal surfaces in the assembly/drill hall area and the kitchen . Twenty-one wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. All Sample results were below reading limits (BRL) in the kitchen, drill hall, and firing range.

Motor Pool Area: The motor pool area located behind the armory. Vehicles used to during drill. Armory's personnel perform no maintenance operations or vehicle repairs.

e. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

e. **Arms Room/Weapons Vault:** Weapons are stored 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.

i. **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 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office

ATTN: LTC **Non-Responsive**

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office

ATTN: Major **Non-Responsive**

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

Oshea II Industrial Hygiene Consulting
IH Survey Clayton Amory
November 2006

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	1595339
Extech Sound Level Meter	6134582
Extech Sound Calibrator	5431625

Enclosure No. 1

DD2214 -Sound Level Survey

Inclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)											
1. DATE (YYYYMMDD) 2006 / 11 / 15					2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</div> <div style="font-size: small; margin-top: 5px;">1- INITIAL SURVEY 2- RESURVEY 3- OTHER</div>						
3. SOUND LEVEL METER			4. MICROPHONE			5. CALIBRATOR					
a. MANUFACTURER Extech			a. MANUFACTURER			a. MANUFACTURER Extech					
b. MODEL 407703		c. SERIAL NO. 041002810		b. MODEL		c. SERIAL NO.		b. MODEL 7703A		c. SERIAL NO. 430X69	
d. LAST ELECTROACOUSTIC CALIB DATE YR/ MO/ D 06/03/06				d. LAST ELECTROACOUSTIC CALIB DATE YR/ MO/ D				d. LAST ELECTROACOUSTIC CALIB DATE YR/ MO/ D 06/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>						7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>					
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Hartford Armory 800 West Main St. Hartford, AI 36344								9. PRIMARY SOURCE OF NOISE Trucks			
								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 (85-100)	c. PLUG AND MUFF (100-110)	d. PLUG + MUFF + TIME LIMIT (Greater than 110)			
Hemmet Cargo	S		88.8			X					
HUMMWV	S		86.5			X					
Hemmet Recovery	S		90.9			X					
5 KW Generator	S		92.0			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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.											
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) All who work in this shop area											
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION											
a. NAME (Last, First, Middle Initial) SVC [REDACTED]				b. TELEPHONE (include area code) 334-588-3222				c. ORGANIZATION Hartford 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

Enclosure No. 3

BEST AVAILABLE COPY

NSN	ITEM	UM	REORDER	OH	ORDER
01-464-9125	ANTI-FREEZE	GAL	10		
00-186-6681	OIL SAE 30W	QT	8		
01-186-6668	OIL SAE 10W	5 GAL	1		
01-178-4725	OIL SAE 15W40	QT	48		
01-438-6082	OIL SAE 15W40	5 GAL	1		
01-353-4799	DEXRON III TRANS FLD	QT	24		
00-935-5851	GREASE AIRCRAFT	35 LB	1		
01-197-7693	GREASE G A A	TUBE	24		
01-197-7692	GREASE G A A	35 LB	1		
01-102-9455	BRAKE FLUID SILICONE	GAL	5		
01-039-3842	DEICING FLUID	5 GAL	1		
00-529-7518	PENETRATING OIL	CAN	12		
00-873-9091	PENETRATING OIL	CAN	12		
01-054-6453	C L P	PT	12		
01-053-6688	C L P	GAL	5		
00-274-5421	DRY CLEANING SOLVENT	5 GAL	1		
00-823-7861	STARTING FLUID	CAN	12		
00-269-1272	OIL DRY	50 LB	5		
00-356-4836	DEIOIZED WATER	5 GAL	1		
01-035-5393	GEAR OIL 80W90	5 GAL	2		

Laboratory Analysis

Enclosure No.4

Analytical Environmental Services, Inc.

Date: 11/28/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: OSHA II
Project: HARTFORD
Delivery Order:
PO No:

Lab Order: 0611B70
Date Received: 11/20/2006 2:25 PM
Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0611B70-001A	31101	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-002A	31102	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-003A	31103	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-004A	31104	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-005A	31105	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-006A	31106	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-007A	31107	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-008A	31108	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-009A	31109	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-010A	311010	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-011A	311011	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-012A	311012	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-013A	311013	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-014A	311014	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-015A	311015	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-016A	311016	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-017A	311017	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-018A	311018	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-019A	311019	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-020A	311020	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY
0611B70-021A	311021	BRL	µg. Total	20	1	11/6/2006	11/27/2006	JY

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Dilution Factor

Results are blank corrected where applicable

Page 1 of 1

Full Time Personnel

SFC
SSG
SGT



Enclosure No. 5

BEST AVAILABLE COPY

HHIM

Enclosure No.6

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC_01000

INSTALLATION_AARNG

BLDG_____

ROOM_____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
AA	ADO	YR 06/ 11/15	KJS	NG
SUPERVISOR	ORGANIZATION			RAC
SSG Non-Response	Alamo Armory Signal Net Support Brigade			3
PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	# MIL
334-588-3222	x /	6-8 hours/ day	3 /	/
LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	1	0	0	0
NO VENTILATION UNITS				

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED

PPE	REQUIRED	UTILIZED	REQUIRED	UTILIZED	EYES/FACE	R U
GLOVES	R U	RESPIRATOR	R U		CHEM/SPLASH	/
ACID	/	AIRLINE	/		FULL FACE SHIELD	/
COLD SURFACE	/	ABRASIVE BLASTING HOOD	/		CHEM/SAF IMPACT	x / x
HOT SURFACE	/	DISPOSABLE	/		SAFETY IMPACT	/
NBC AGENTS	/	FULL FACE AIR PURIFYING	/		WELDING HELMET	/
OIL	/	1/2 FACE AIR PURIFYING	/		WELDING GOGGLES	/
SOLVENTS	/	POWERED AIR PURIFYING	/		LASER EYE PROTECT	/
SURGICAL GLOVES	/	1/4 FACE AIR PURIFYING	/		OTHER	/
OTHER	/	SCBA	/			
EARS/ HEARING	R U	BODY	R U		HEAD AND FEET	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
P0NOISECO	P0noisecc	2	0	Noise, continuous
P0FOOTHAZ	P0stress	3	0	Mental / physical stress
P0FLYPROJ	P0lifting	3	D	Heavy lifting
P0EYHAZA	P0eyehaza	2	A	Eye Hazards
P0FLAMMHAZ				
P0LIFTING				
P0SHARP0BJE				
P0ELSHOCK				
C0LUBE0IL				

DESCRIBED OPERATION

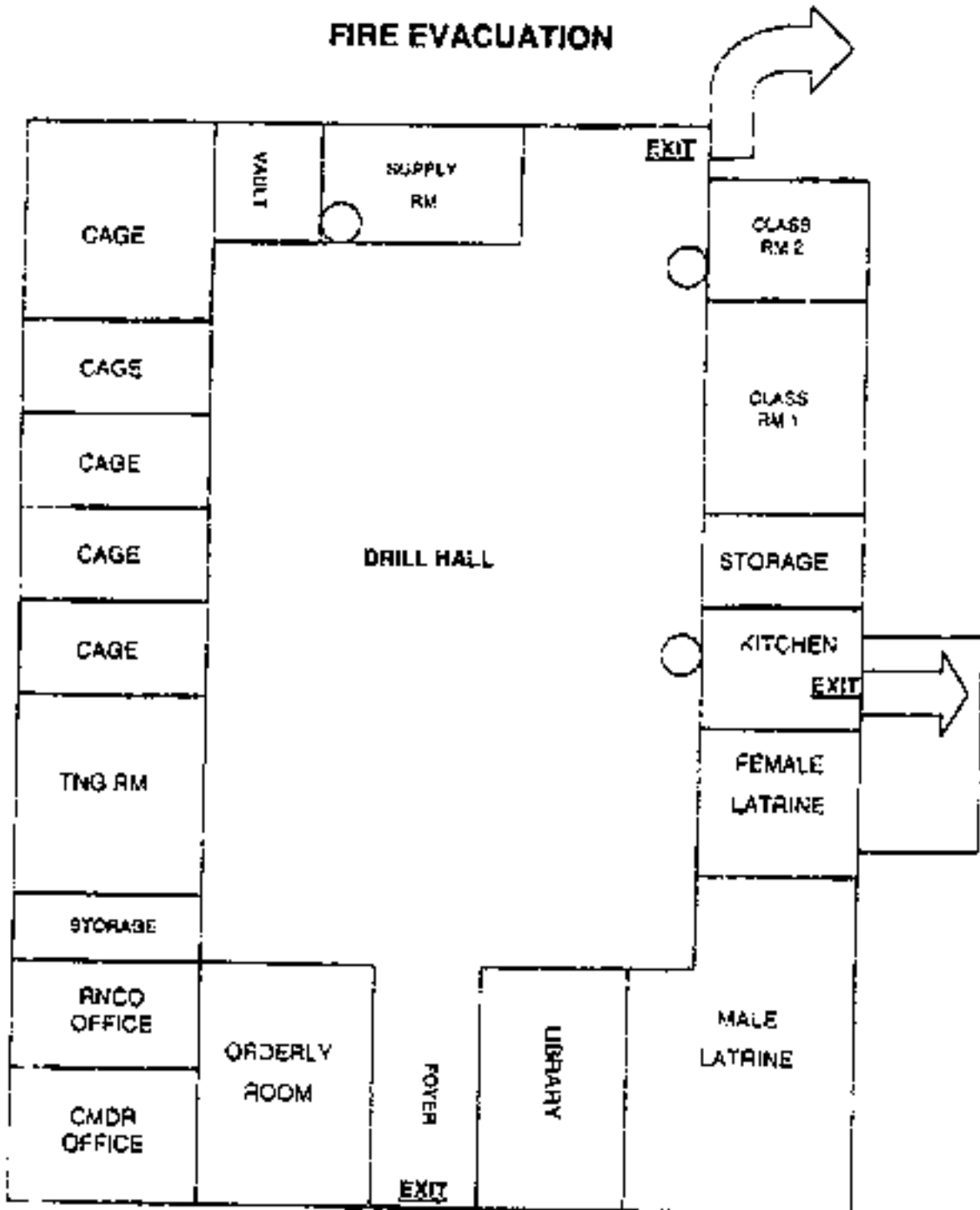
Administrative duties are performed six to eight hours a day and consists of answering phones, using computers, generating paper work and running errands.

PERSONNEL LIST ATTACHED

Facility layout

Enclosure No. 7

**COMPANY B 1ST BN 131ST ARMOR
HARTFORD, AL
FIRE EVACUATION**



○ FIRE EXTINGUISHER

➡ EXIT AND REPORT TO EAST
PARKING LOT FOR ACCOUNTABILITY



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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COI **Non-Responsive** Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SFC **Non-Responsive** Facility Supervisor, 1655-A South Pelham Road, Jacksonville, AL 36265

SUBJECT: Industrial Hygiene Survey of the Jacksonville Armory.

1. References.

a. Report completed 19 February 2007, Industrial Hygiene report for the Jacksonville Armory.

b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.

c. AR 40-5, Preventive Medicine, 22 July 2005.

d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.

e. AR 385-10, 29 February 2000, Army Safety Program.

f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.

g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.

h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.

i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.

j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the Jacksonville Armory.

b. b. Ms [Non-Responsive] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges. (RAC 1)

b. Follow the remainder of the contractor's recommendations on page 5 of the contractors report.

c. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

d. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN: MAJ [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

19 February 2007

MEMORANDUM FOR: Jacksonville Armory, ATTN: SFC Non-Responsive 1655-A South Pelham Road, Jacksonville, Alabama 36265

SUBJECT: Industrial Hygiene Survey of Jacksonville National Guard Armory, Jacksonville, Alabama

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 Jacksonville National Guard Armory, Jacksonville, Alabama

2. 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 the Jacksonville National Guard Armory, Jacksonville, Alabama on 12 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory. The building was visually examined and employees were interviewed for data related to the building and the operations performed. The illumination was measured and lead wipe samples were taken in various areas of the Armory.

3. Facility Description. This facility currently houses three units 666th EOD, the 22nd Recruiting battalion (team 4), and the 2025th Transportation. The facility houses administrative areas, three Supply Rooms, several Arms Rooms and a drill hall and a deactivated indoor firing range.

4. Findings.

a. Stained ceiling tiles and blistering paint was observed in rooms 121, 130, and 131. The metal roofing structure is rusting above the drop ceiling in rooms 116 and 131. The blistering paint is a reoccurring issue in this facility. The state facility engineer's office conducted a visual survey of the blistering paint and informed the Armory that it may be possible mold growth. The engineering office performed remediation by scraping the blistering paint; applying a bleach solution and repainting affected areas. The affected painted areas have continued to blister. The Armory is a flat roof structure. Water may be infiltrating from the roof which is evident from the rusting roofing trusses on the interior of the building. The gutters along the exterior of the building are diverting the water along the brick façade and causing structural damage and possible water intrusions. The gutter outlet was not attached to the downspout in one area of the gutter system. The splash block at one end of the building had dislodged and is causing water damage around the foundation of the building. The wood around the windows of the facility have swelling and are bowed. A recent storm has dislodged the roof insulation from between the wooden header and the metal sheathing of the roof. The wooden header under the gutter system is exposed allow water damage to the header.

b. A heavy accumulation of dust and dirt are on the supply and return air grills throughout the facility. The facility has two air handling units. The filters in the systems are placed haphazardly in both units. Each unit may accommodate 6-8 filters. The air filters present had a heavy accumulation of dust. The facility employee had never changed the filters and was under the impression that it was a state responsibility. Inquiries to the engineering office and surrounding Armories, determined that filter changing is the responsibility of the individual Armories.

c. Illumination was surveyed throughout the building. Illumination in the 666th EOD offices was not measured because personnel were not available. A diagram of illumination measurements can be found within the enclosure of this report. The areas listed below are below the standards required in reference f. The findings are as followed in Foot-candles (FC):

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

Page 2

SUBJECT: Industrial Hygiene Survey of Jacksonville National Guard Armory, Jacksonville, Alabama

Table 1

AREA/LOCATION	MEASURED PC	REQUIRED PC
Room 112 office	6.0	50-75
Room 118 office	18.4	20-30
Room 135 (NBC vault)	9.0	20-30
Room 112 (office)	31-112	50-75
Room 111 (tool storage)	7.0	20-30

d. A deactivated indoor firing range is currently being used for storage. The range has five firing lines. The target carriers and bullet trap are present. Metal fragments and slugs are in several trays, located in the pit. The ventilation is still operable. The acoustic material on the walls and ceiling is present. File cabinets, heavy wheeled vehicle tires (new), chairs and other excess and frequently used items are stored in the range. There was no documentation that the range was cleared prior to conversion to a storage area. Twenty Lead wipe samples and one blank were taken in various locations throughout the range and the Armory. Sample locations and results are in the table 2 below.

Table 2

Sample #	Location	Results
1	Backstop right side 4 ft up	58500 ug/ft ²
2	Backstop center 3 ft up	180000 ug/ft ²
3	Backstop left side 11 ft up	146000 ug/ft ²
4	Floor at pit	11100 ug/ft ²
5	Top of file cabinet in middle of range	145 ug/ft ²
6	Top of file cabinet in front of lane 1	190 ug/ft ²
7	Rear window to observation room in range	102 ug/ft ²
8	Right acoustic wall 5 ft up	185 ug/ft ²
9	Floor center of range	108 ug/ft ²
10	Floor front 1.5 ft from range entrance	297 ug/ft ²
11	Randomly selected table used to clean weapons	28 ug/ft ²
12	Top of solvents tank on drill hall floor	46 ug/ft ²
13	Top of dishwasher in the kitchen	22 ug/ft ²
14	Center of drill hall floor	BRL
15	On floor outside of room 135	141 ug/ft ²
16	Table top of room 113, boxes taken from the range	BRL
17	Return air grill in room 138	91 ug/ft ²
18	Filter from AHU2, room 141	BRL
19	Filter from AHU1, room 141	BRL
20	Room 122, center window observation room	289 ug/ft ²
Blank	Blank	BRL

*BRL indicates below reporting limits

USE Consulting
1215 Scattered Precipitant, Geneva, NJ 04527-144
Telephone: 410-551-2717

SUBJECT: Industrial Hygiene Survey of Jacksonville National Guard Armory, Jacksonville, Alabama

e. A solvent tank used to clean weapons is stored on the drill hall floor. The solvent is a carbon removing compound. The solvent tank is not located near a door or window that allows good general exhaust ventilation.

f. Personnel files were removed from the range and placed in room 113. The records were stored in boxes that had gotten wet. Mold growth is visible on many of the boxes and records. Employees are sorting through the records determining their final disposition. The door to the room is closed for security purposes. Upon opening the door there is a distinct, heavy mold and mildew odor.

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Non-Responsive

LAE Consulting

5 Encl

1. Building Diagram
 2. HHIM
 3. Facility Photos
 4. Laboratory Results
 5. MSDS
- CF: Alabama

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

Page 4

SUBJECT: Industrial Hygiene Survey of Jacksonville National Guard Armory, Jacksonville, Alabama

6. Recommendations.

a. Recommend the state facility engineers inspect the roof for water intrusion areas; repair the roof if leaks are found; repair the gutter system around the building; replace all stained ceiling tiles; ensure all splash blocks situated to allowing water to flow away from the foundation of the building. Recommend the state Safety and Occupational Health office evaluate the blistering paint to determine if mold is present and to provide assistance if remediation is needed.

(RAC 3)

b. Recommend a cleaning of the air ducts in the facility. In the interim, clean the supply and return air grills throughout the facility. Determine the size and quantity of air filters needed for both air handling units. Ensure filters are changed every 30 days. (RAC 2)

c. Consider purchasing supplemental lighting such as desk lamps and a floor lamp. If monies are available, recommend upgrading the lighting fixtures to meet the recommended requirements.

(RAC 3)

d. Recommend that facility personnel stop all activity in the range until guidance from the state is provided. Recommend the state Safety and Occupational Health office review the Lead wipes sample results of this facility to determine if closure and decontamination is needed.

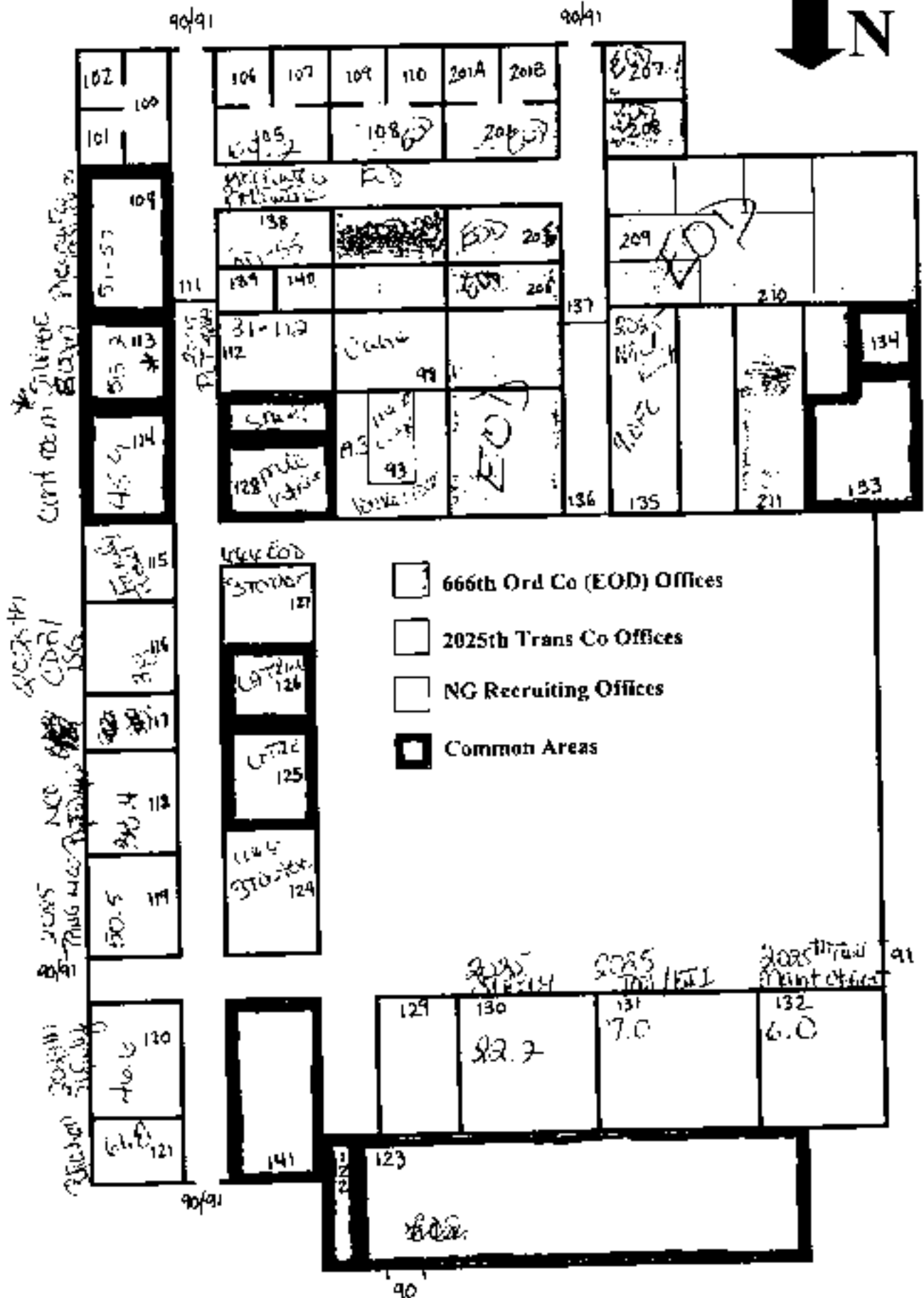
(RAC 2)

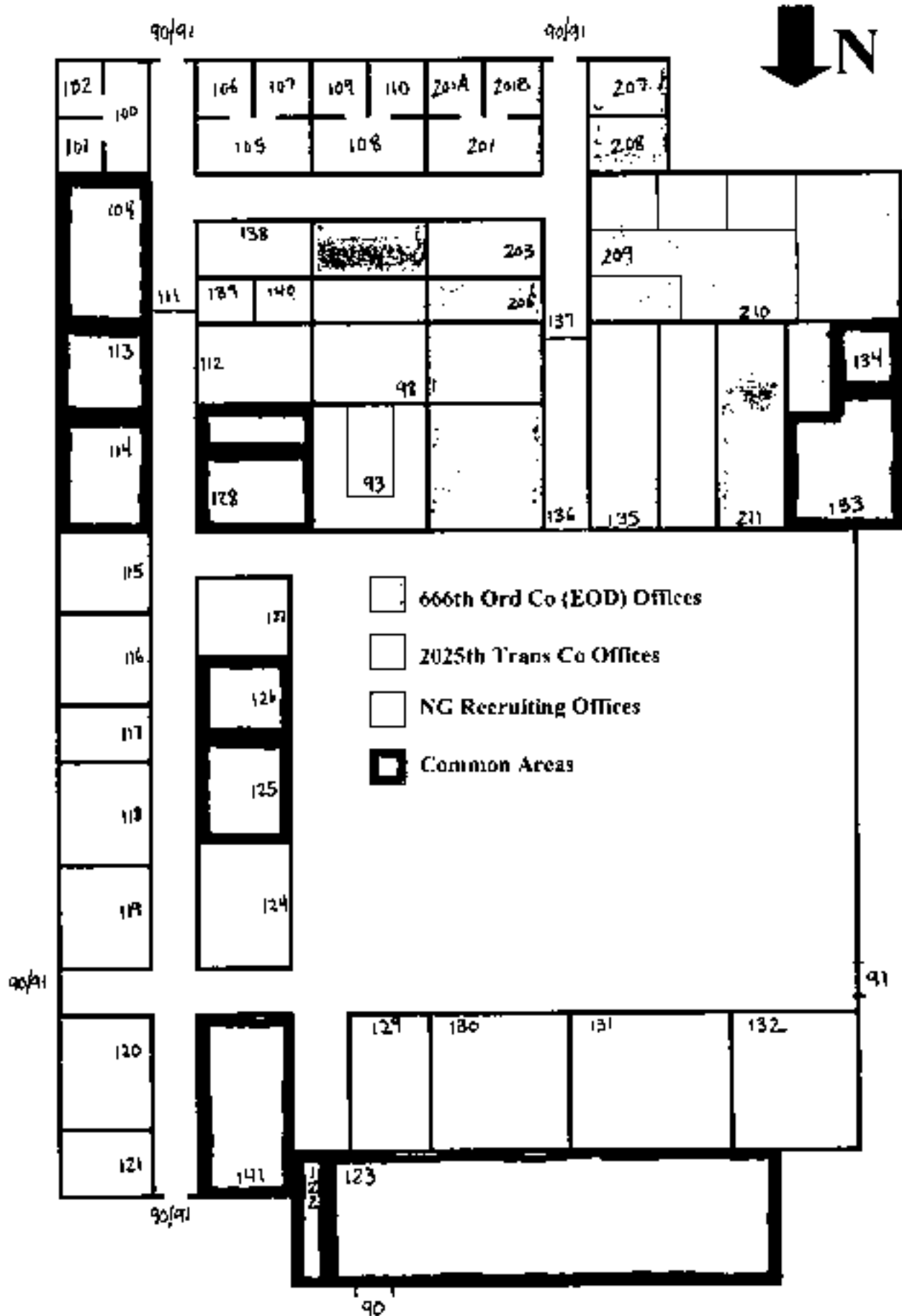
e. Provide adequate ventilation while using the solvent by relocating it near the exit or garage doors of the drill hall. (RAC 3)

f. Wear disposable gloves when handling the boxes and files. Wash hands thoroughly after handling records. Contact the state Occupational Health office for assistance with the disposition of the moldy records and any other remediation/cleanup that may be needed in the room.

(RAC 3)

Jacksonville, AL BEST AVAILABLE COPY LIGHTING SURVEY







ANALYTICAL ENVIRONMENTAL SERVICES, INC.

February 27, 2007

Non-Responsive

LAE Consulting
1218 Scattered Pines Ct
Severn, MD 21144

TEL: (410) 551-2717

FAX: (410) 551-7215

RE: Jacksonville Armory

Dear

Non-Responsive

Order No.: 0702B55

Analytical Environmental Services, Inc. received 21 samples on 2/21/2007 12:40:00 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 06/01/06-06/30/07.

-AIHA Certification number 505 for analysis of Industrial Hygiene samples (Organics, Inorganics), Paint Chips, Soil and Dust Wipes, effective until 05/01/07.

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

Director of Project Management



ANALYTICAL ENVIRONMENTAL SERVICES, INC.
37 Essential Parkway, Atlanta GA 30340-3704
AES TEL: (770) 457-8177 / TOLL-FREE (800) 972-4889 / FAX: (770) 457-8188

CHAIN OF CUSTODY

Work Order 07020558
Date: 19 Feb 07 Page 1 of 2

COMPANY LAE Consulting		ADDRESS 1218 Scattered Pines Ct Spartanburg, MD 21144		PHONE 410.551.2717		FAX 410.551.7215		SIGNAL [REDACTED]		ANALYSIS REQUESTED pb wa		Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		No. of Containers 20	
SAMPLE ID		DATE		TIME		Grab		Composite		Matrix (See codes)		REMARKS		BEST AVAILABLE COPY	
1 Blank		12 Feb				X				D					
2 Backstop PB1															
3 pb2															
4 pb3															
5 pb4															
6 pb5															
7 pb6															
8 pb7															
9 pb8															
10 pb9															
11 pb10															
12 pb11															
13 pb12															
14 pb13															
15															
16															
17															
18															
19															
20															
REQUESTED BY		DATE/TIME		RECEIVED BY		DATE/TIME		PROJECT NAME		PROJECT #		RECEIPT		Total # of Containers	
1. Behru Mohammed		2/21/07		12:40		JACKSONVILLE ARMY		JACKSONVILLE, A LABANA		20		20		20	
2.															
3.															
SHIPMENT METHOD		OUT		IN		CLIENT		FEDS		LPS		MAIL		COURIER	
VIA		VIA		VIA		OTHER		OTHER		OTHER		OTHER		OTHER	
2395															
SPECIAL INSTRUCTIONS/COMMENTS		Email Results: [REDACTED]@aol.com		[REDACTED] 1/17/07		[REDACTED] 1/17/07		[REDACTED] 1/17/07		[REDACTED] 1/17/07		[REDACTED] 1/17/07		[REDACTED] 1/17/07	
RESULTS IN REPORT 1/17/07															
SAMPLES RECEIVED AFTER 3:00 PM OR SATURDAY ARE CONSIDERED AS RECEIVED ON THE NEXT BUSINESS DAY; IF NO FAT IS MARKED ON COC AES WILL PROCEED AS STANDARD FAT.															
PRESERVATIVE CODES		A - Ac		GW - Groundwater		SB - Seawater		SD - Soil		SW - Surface Water		W - Water (Blebs)		DW - Drinking Water (Blebs)	
1 - Ice only		N - Nitric acid		B4 - Sodium acid + ice		SNA-1 - Sodium Borohydride/Methanol + ice		O - Other (specify)		NA - None		D - Other (specify)		D - Other (specify)	



COMPANY LAE Consulting email: lisa@lae@aol.com PHONE: 410.551.2717 FAX: 410.551.7215		ADDRESS 1218 Scattered Pines Ct SEVEN, MD 21144		ANALYSIS REQUESTED (See codes)		Visit our website www.aesatlanta.com to check on the status of your results, place bottle orders, etc.		REMARKS (See codes)		Best Available Copy	
SAMPLE ID Pb14 Pb15 Pb16 Pb17 Pb18 Pb19 Pb20		DATE/TIME 2/12/07 1240		PROJECT INFORMATION JACKSONVILLE ARMOY		RECEIPT Total # of Containers 21		Transmittal Time Requested Standard 5 Business Days 2 Business Day Rush Next Business Day Rush Same Day Rush (with req.) Other		STATE PROGRAM (if any) E-mail: <input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> N DATA PACKAGE I II III IV	
SHIPMENT METHOD CLIENT Fedex UPS OTHER GROUND AIR		SHIPMENT METHOD VIA VIA VIA CLIENT Fedex UPS OTHER		PROJECT NAME JACKSONVILLE ALABAMA (IF DIFFERENT FROM ABOVE) NO BUREAU - ITA OFFICE College Park GA		QUOTE # PM		STAMP 00000		STAMP 00000	
INSTRUMENTATION LNY WIFE Results signed 2/1/07		DATE/TIME 2/12/07 1240		PROJECT INFORMATION JACKSONVILLE ARMOY		RECEIPT Total # of Containers 21		Transmittal Time Requested Standard 5 Business Days 2 Business Day Rush Next Business Day Rush Same Day Rush (with req.) Other		STATE PROGRAM (if any) E-mail: <input type="checkbox"/> N <input type="checkbox"/> Y <input type="checkbox"/> N DATA PACKAGE I II III IV	

Analytical Environmental Services, Inc.

Sample/Cooler Receipt Checklist

Chem 1. A.E. Constance _____ Work Order Number 0702 8131 _____Checklist completed by PJ [Signature] _____ Date 2/2/01 _____
Signature DateCarrier 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? ^{yes 2/1/01} ~~yes 2/1/01~~ Yes ☒ No ☐Cooler #1 Alaska 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 label(s)? 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 ALISA test) 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.

C:\Documents and Settings\Chemist\Desktop-CHECKLIST.txt

Analytical Environmental Services, Inc.

Date: 27-Feb-07

CLIENT: LAE Consulting
Project: Jacksonville Armory
Lab Order: 0702B55

CASE NARRATIVE

The COC was not signed when it was relinquished.

The collection date was not listed on the sample containers. The collection date listed for the first sample on the COC was used as the collection date for all samples.

Sample "Backstop PB1" was labeled as "Pb1" on the sample container.

Samples should be analyzed for Lead per Non-Responsive on 2/22/07.

Analytical Environmental Services, Inc.

Date: 2/27/2007

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: LAF Consulting
 Project: Jacksonville Armory
 Delivery Order:
 PO No:

Lab Order: 0702B55
 Date Received: 2-21-2007 12:40 PM
 Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0702B55-001A	Blank	BRL	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-002A	Backstop Phi	58500	µg/L ²	20000	100	2-12-2007	2-26-2007	JY
0702B55-003A	Pb2	180000	µg/L ²	5720	286	2-12-2007	2-26-2007	JY
0702B55-004A	Pb3	145000	µg/L ²	5140	287	2-12-2007	2-26-2007	JY
0702B55-005A	Pb4	11100	µg/L ²	287	143.5	2-12-2007	2-26-2007	JY
0702B55-006A	Pb5	145	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-007A	Pb6	190	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-008A	Pb7	102	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-009A	Pb8	185	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-010A	Pb9	108	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-011A	Pb10	297	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-012A	Pb11	28	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-013A	Pb12	46	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-014A	Pb13	22	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-015A	Pb14	BRL	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-016A	Pb15	141	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-017A	Pb16	BRL	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-018A	Pb17	91	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-019A	Pb18	BRL	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-020A	Pb19	BRL	µg/L ²	20	1	2-12-2007	2-26-2007	JY
0702B55-021A	Pb20	285	µg/L ²	20	1	2-12-2007	2-26-2007	JY

Qualifiers: BRL = Not Detected at the Reporting Limit

DF = Dilution Factor

Results are blank corrected where applicable

Page 1 of 1

Analytical Environmental Services, Inc.

Date: 22-Feb-07

CLIENT: LAF Consulting

Work Order: 0702BSS

Project: Jacksonville Armory

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPE_MET_AA

Sample ID: MB-83161	SampleType: MBLK	TestCode: WIPE_MET_A	Units: ug. Total	Prep Date: 2/24/2007	RunNo: 89828						
Client ID	Batch ID: 83161	TestNo: N7082		Analysis Date: 2/26/2007	SeqNo: 2002740						
Analyte	Result	POL	SPK value	SPK RefVal	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPD Limit	Qual
Lead											

Sample ID MB-83162	SampleType MBLK	TestCode WIPE MET_A	Units. ug. Total	Prep Date: 2/24/2007	RunNo 89835						
Client ID	Batch ID: 83162	TestNo N7082		Analysis Date 2/26/2007	SeqNo 2002908						
Analyte	Result	PCL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead											

Sample ID LCS-83161	SampleType LCS	TestCode WIPE_MET_A	Units ug. Total	Prep Date 2/24/2007	RunNo 99829						
Client ID	Batch ID 83161	TestNo N7082		Analysis Date 2/26/2007	SeqNo 2002741						
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	ConcLim L	HighLim H	RPD Ref Val	%RPD	RPDLim L	Qual
Lead	1049	42.8	957	0	110	80	120	0	0	0	

Sample ID: LCS-83162	SampleType: LCS	TestCode: WIPE_MET_AA	Units: µg. Total	Prep Date: 2/24/2007	RunNo: 89835						
Client ID:	Batch ID: 83162	TestNo: N7082		Analysis Date: 2/26/2007	Seq No: 2002910						
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD RefVal	%RPD	RPD Limit	Qual
Lead	1102		42.8	957	0	115	80	120	0	0	

Sample ID LCS0-B3161	SampleType LCS0	TestCode WIPE_MET_A	Units ug. Total	Prep Date: 2/24/2007	RunNo: 99829						
Client ID	Batch ID B3161	TestNo N7082		Analysis Date: 2/26/2007	SeqNo: 2002742						
Analyte	Result	POL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPD Limit	Qual
Lead	1042	42.2	957	0	109	60	-20	1049	0.632	25	

Qualifiers: R Analyte detected in the associated Method Blank
 J Timing limits for preparation or analysis exceeded
 K RPD outside accepted recovery limits
 BRT Below Reporting Limit
 J Analyte detected below quantitation limits
 N Spike Recovery outside accepted recovery limits
 F Value above quantitation range
 N Analysis not NELAC certified

CLIENT: LAF Consulting
 Work Order: 0702HSS
 Project: Jacksonville Army

ANALYTICAL QC SUMMARY REPORT

TestCode: WIPE_MET_AA

Sample ID	LCSD-03162	Sample Type	LCSD	TestCode	WIPE MET_AA	Lot#	pg. Total	Prep Date	2/24/2007	RunNo	00835		
Client ID		Batch ID	03182	TestNo	N7062			Analysis Date	2/26/2007	SeqNo	20029-1		
Analyte		Rebut	1049	Pool	SPK value	SPK Ref Val	%REC	LowLine	HighLimit	RPD Rel Val	%RPD	RPD Limit	Qual
Lead					416	957	0	110	80	120	1102	4.97	75

Qualifiers: H Analyte detected in the associated Method Blank
 II Holding times for preparations or analysis exceeded
 K RPD outside accepted recovery limits

HRL: Below Reporting Limit
 J Analyte detected below quantitation limits
 N Spike Recovery outside accepted recovery limits

E Value above quantitation range
 N Accurate not NPLAC certified



Material Safety Data Sheet

Action 1 – Chemical Product And Company Identification

Manufacturer:	U.S. Industries	Emergency Telephone Number	(800) 424-8300 (Chemical)
	60033 Research Place	Registration Telephone Number	(714) 423-4533
	Greentree, MD 21114	Date of Production	November 11, 2003
DC 24 ID			
64-Function	Charger Re-towing Compound, 6 Gallon		
18 Part Number	P/C 1110 Type II		
Internal Stock Number	0374... 000		
USE Code	6850-00-0645 2012		
	04TTS		

Action 2 -- Composition / Information On Ingredients

CSAS No.	Ingredient	Wt% (max)	ACCEP.TIV *STEL*	OSIA.FEL *STEL*	Value Pressure *mm.Hg. 20°C.
141 43.5	Monomethylacrylamide	22	3 ppm *0.0001*	3 ppm *0.0001*	4.1
111 76.2	2-Butoxyethanol	9	25 ppm	25 ppm	0.26-0.70°C
111 77.3	2-(2-Methoxypropoxy) ethanol	7	4E	NE	0.25-0.70°C
112 70.5	2-(2-Butoxyethoxy) ethanol	4	4E	NE	0.06-0.91°C
112 60.1	2-Octadecylacrylate	2	4E	NE	<1

Section 3 – Hazards Identification

MISUSE OF EXPOSURE: Exposure may be by INGESTION, INHALATION, SKIN or EYE contact, depending on condition of use. To minimize exposure, follow recommendations for proper use, ventilation, and personal protective equipment.

ADDITIONAL EFFECTS OF OVEREXPOSURE: Continued use in skin and eyes. Eye contact may produce severe damage if eye is permanently stuck. Skin contact may produce severe irritation or burns. Harmful quantities may be absorbed through skin in extreme cases. Absorption may cause upper respiratory irritation or severe nervous system dysfunction. Ingestion can cause nausea, vomiting, and gastrointestinal upset.

ADDITIONAL EFFECTS OF OVEREXPOSURE: REPEATED or prolonged skin contact may produce chronic irritation or dermatitis, characterized by redness, scaling, or itching. REPEATED eye exposure may produce chronic inflammation of the eye or corneal damage.

ADDITIONAL INFORMATION: None of the hazardous ingredients are listed as carcinogens by IARC, NTP, or OSHA.

Section 4 — First Aid Measures

CAUTION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. Immediately move to fresh air and breathing in fresh air. Get medical attention.
CONTRACT: Irritability, numbness with stinging of water, skin redness, eye irritation, coughing and throat irritation.
DISPOSAL: Immediately put eyes with plenty of water for at least 15 minutes. Consult medical personnel for further treatment. Do not induce vomiting. If swallowed, drink plenty of water to drink. Use medical attention. 200°C

Section 5 — Fire Fighting Measures

FLUKE-POINT: A to B only	UCL: N/A	UCL: N/A
EXTINGUISHING MEDIA: This is a water-based product and is not expected to burn.		
SPECIAL PRETECTIVE EQUIPMENT: Wearer may be asked to wear eye-protected goggles.		
Should wear hot protection clothing, including self-contained breathing equipment.		
NEPA ratings:	HEALTH 2; FLAMMABILITY 0; REACTIVITY 0	
HMS classification:	HEALTH 2; FLAMMABILITY 0; REACTIVITY 0	

Section 5 — Accidental Release Measures

PERSONAL PRECAUTIONARY MEASURES: Avoid irritation (Use good ventilation. Read insect repellent before using and follow all label directions).
ENVIRONMENTAL PRECAUTIONARY PROCEDURE FOR C. BULLINGADOSEPHYON: Wipe, scrape or soak up contents in an inert material. Pick up soil for toxicity or a suspect and place in a sealed container. Dispose of in accordance with applicable federal, State or local regulations.

Section 7—Handling and Storage

HANDLING AND STORAGE: Keep out of reach of children. Do not take internally. STORING: Store in a dry cool place.

Section B – Exposure Controls/Personal Protection

ENGINEERING CONTROLS. Local Exhausts are available. General exhaust acceptable if the exposure to materials in Section 2 is maintained below personal exposure limits.

RESPIRATORY PROTECTION. If personal exposure cannot be controlled to below applicable limits by ventilation, wear a properly fitted organic vapor/acid gas/ester respirator approved by NIOSH/MSHA for protection against materials in Section 2.

GLOVES. Wear nitrile gloves or gloves with chemical resistance in the equivalents listed in Section 2.

SKIN PROTECTION. Impervious gloves to protect skin. Wear proper attire (e.g. long sleeves, long pants, closed shoes, socks, glasses with side shields or chemical goggles).

OTHER PERSONAL PROTECTION DATA. Use only with adequate ventilation. Avoid contact with skin & eyes. Wash hands after using.

Section 9 — Physical and Chemical Properties

PHYSICAL STATE.	Liquid
COLOR	Light Amber
ODOR	Mild
BOILING POINT	212°F
SPH	1.0-1.20
SPECIFIC GRAVITY	0.98
DENSITY	0.25 g/cc
WATER SOLUBILITY	>1
FLAMMABILITY	Strongly flammable
TOXICITY	Slight



View of Jacksonville Armory



View of stained ceiling tiles in room 121



Example of soiled air grills that are typical in this facility



View of personnel records that were taken from the range and placed in room 113



View of mold and mildew on box with records, this is an example of the damage the material that was stored in the range.



View of the rusting roof structure in room 116



View of rusting roofing structure located in room 116



View of blistering paint in room 130



View of fuel operated forklift stored in the drill hall



View of the observation room located off the range area



View of solvent tank stored near electrical box on the drill hall floor.



Exterior view of structural damage with possible water intrusion.



View of the gutter outlet that is dislodge from the downspout



View of roof insulation that has dislodged from the roof



View of roof insulation that has dislodged from the roof



View of missing metal sheathing at the roof header, exposing wood



View of water damage around windows. (Wood header is swelling)



View of a dislodged splash block and water intrusion at the foundation



Up range view of the deactivated
in door firing range (associated range apparatus are present)



Down range view of the indoor firing range



View of the trays located in the pit with residual slugs and metal fragments



View of Lead wipe samples 1 and 2, located on the baffle wall of pit



View of Lead wipe samples 3 and 4, located on the baffle wall of pit



View of lead wipe sample 5, located on top of a file cabinet in the range



Lead wipe sample 6, located on top of file cabinet near firing line 1



View lead wipe sample 7, located on the rear window of the observation room on the range side



Lead wipe sample 8, located on acoustic wall right side 5 feet up.



Lead wipe sample 9, located in the center of the range floor



Lead wipe sample 9, located on the floor 1.5 feet from entrance to the range



Lead wipe sample 11, on a random table used to clean weapons in the drill hall



Lead wipe sample 12, located on top of the solvent tank in the drill hall



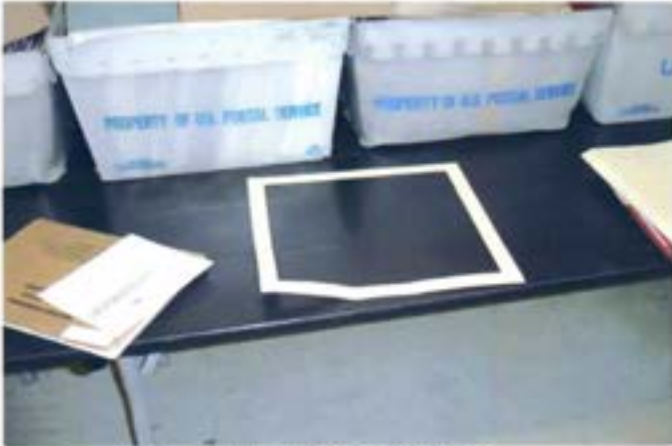
Lead wipe sample 13, on top of the dishwasher in the kitchen



Lead wipe sample 14, located in the center of the drill hall floor



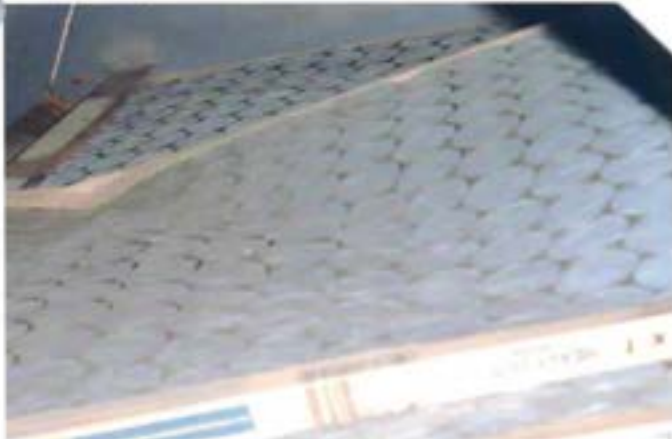
Lead wipe sample 15, located on the floor in front of room 135



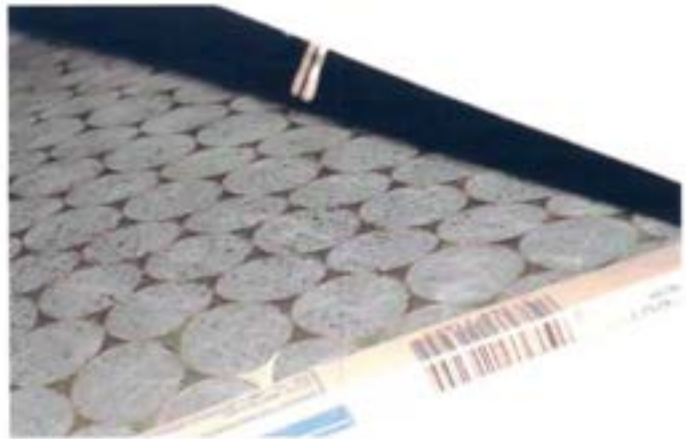
Lead wipe sample 16, table top in room 116 (place where boxes taken from the range are stored)



Lead wipe sample 17, located on the air grill in room 138



Lead wipe sample 18, located on the air filter from AHU 2



Lead wipe sample 19, located on the air filter from AHU 1



Lead wipe sample 20, located on the observation room window within the observation room

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

AriLOC D1000		INSTALLATION JACKSONVILLE ARMORY		BLDG/ROOM NO. 1655-A SOUTH PELHAM ROAD JACKSONVILLE, AL 36265	
LOCATION/CODE AA			OPERATION/CODE ADD		
SURVEY DATE 12 FEB 07		EVALUATOR LAE CONSULTING			
MACOM/CODE NG		SUBMACOM/CODE XX		SUPERVISOR SFC Non-Responsive	
TELEPHONE/DSN NO. 258.435.6376		UNIT/ORGANIZATION JACKSONVILLE ARMORY		RAC 4	FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER 2	

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
TING	6.0-112	FC	50-100	UNACOMM

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

GLOVES	R/U	RESPIRATOR	NIOSH TC NO.	MANUFACTURER	R/U
ACID	/	AIR LINE			/
COLD SURFACES	/	ABRASIVE 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			/

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

SECTION 4: HAZARD INVENTORY DATA

[illegible]

SECTION 5: PERSONNEL DATA

[illegible]

SECTION 6: COMMENTS

0 No comments

See attached sheet

HEALTH HAZARD INFORMATION MODULE: INDUSTRIAL HYGIENE SURVEY

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

FACILITY LOC 01000		INSTALLATION JACKSONVILLE ARMORY		BLDG/RM NO. 1655-A SOUTH PELHAM ROAD JACKSONVILLE, AL 36265	
LOCATION/CODE SA			OPERATION/CODE SAH		
SURVEY DATE 12 FEB 07		EVALUATOR LAE CONSULTING			
MACOM/CODE NG		SUBMACOM/CODE		SUPERVISOR SFC Non-Responsive	
TELEPHONE/DSN NO. 256.435.8376		UNIT/ORGANIZATION JACKSONVILLE ARMORY		RAC 4	FREQUENCY (hrs/day) +8 hrs
NO. CIV(S)	NO. MIL	NO. CONTRACTORS	NO. LOC(S)	NO. OTHER 2	

SECTION 2: FACILITY DATA

LAB HOODS 0	VAPOR DEGREASERS 0	SPRAY BOOTHS 0
MAINTENANCE BAYS 0	OPEN SURFACE TANKS 0	VENTILATION UNITS 0

SECTION 3: SURVEY DATA

CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	STATUS
TING	6.0-112	FC	50-100	UNACOMM

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

GLOVES	R/U	RESPIRATOR	NIOSH TC NO.	MANUFACTURER	R/U
ACID	/	AIR LINE			/
COLD SURFACES	/	ABRAS/ZE 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/FEET	R/U
CHEMICAL SPLASH	X/	CANAL CAPS	/	APRONS	X/	COLD WEATHER BOOTS/HATS	/
FULL FACE SHIELD	/	EARPLUGS	X/	COLD WEATHER CLOTHING	/	HARD HATS	/
CHEMICAL/SAFETY	X/	HELMETS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SAFETY/IMPACT	X/	MUFFS	X	FULL BODY SUIT	/	SAFETY/CONDUCTIVE SHOES	/
WELDING HELMET	/	MUFF/EARPLUG COMBO	/	HEAT REFLECTIVE VEST/SUIT	/	SAFETY/NCN-CONDUCTIVE SHOES	X/
		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	3	

SECTION 5: PERSONNEL DATA

LAST NAME	FIRST NAME	MI	SEX	SSN	CATEGORY

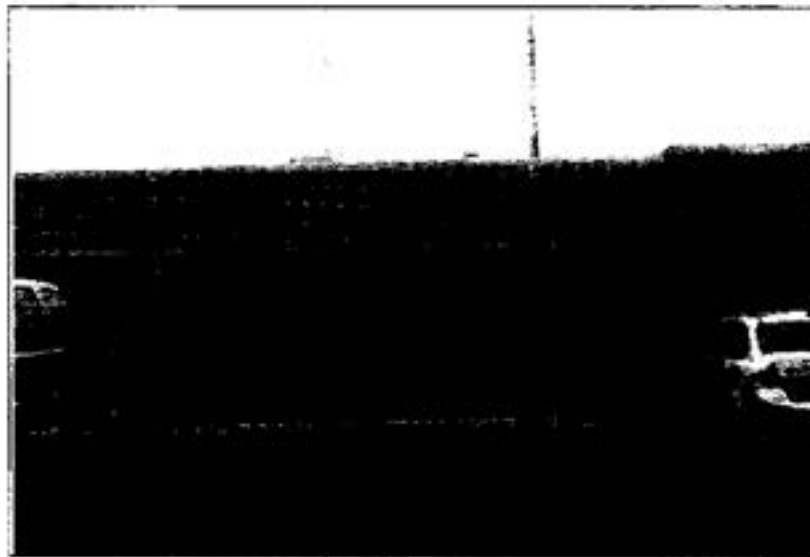
SECTION 6: COMMENTS

☐ No comments

☐ See attached sheet

Industrial Hygiene Baseline Survey Report
For
Alabama Army National Guard
(ALARNG)

At
Jasper Armory
Attention: SFC [REDACTED]
2901 Hwy 69S
Jasper, AL 35501



Prepared for:

National Guard Bureau
Regional Industrial Hygiene Office
510 Plaza Drive Suite 1530
College Park, GA 30349

By
SGT [REDACTED]
ALARNG
March 7, 2012

Table of Contents

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Appendices

- A. Laboratory Analytical Results.
- B. Lab Chain of Custody.
- C. References.
- D. Photographs

Jasper Armory

Survey Date: 07 March 2012

Executive Summary

An initial baseline industrial hygiene survey was conducted at the Jasper Armory on 07 March 2012 as part of the Alabama Army National Guard Occupational Health Program to identify potential health hazards in the workplace. The survey consisted of collecting lead wipe samples and bulk asbestos samples, conducting an illumination survey, a noise survey, and an evaluation of the Heating Ventilation and Air Conditioning System (HVAC) as it relates to indoor air quality.

The following table summarizes the survey findings and recommendations for each topic surveyed.

Topic	Summary of Findings	Recommendations
Lead Wipe Samples	<20 to 58 microgram per square foot.	No action.
Asbestos Bulk Samples	There was no suspect asbestos containing material.	No action.
Noise Survey	No sources of noise were identified during the survey.	No action.
Illumination Survey	30 to 140 foot candles.	No action.
HVAC/IAQ	HVAC system in good condition.	No action.

SUBJECT: Industrial Hygiene Survey of the Jasper Armory in Jasper, Alabama on 7 March 2012

BACKGROUND:

Introduction. At the request of Mr. [Non-Responsive] of the National Guard Bureau Region South Industrial Hygiene Office, an initial baseline industrial hygiene survey was performed at the Jasper Armory in Jasper, Alabama. SGT [Non-Responsive] Industrial Hygiene Specialist, conducted the survey on 7 March 2012. The purpose of the survey was to perform an industrial hygiene survey to evaluate potential health hazards present at the armory.

Site Description. The facility, which was constructed in 1970, houses the 77th Quarry & Det 168 Engineer Company. Five full time employees work at this armory. The building is a one-story structure, which consists of an administrative office area, a kitchen, training or classrooms, a drill hall, a supply room, a mechanical room, library, and a conference room. The indoor firing range has been converted to a storage area.

Scope of Work. The work included collecting wipe samples for lead, illumination levels, noise readings, and an evaluation of the ventilation system as it pertains to indoor air quality.

Methodology Lead wipe samples were collected from various surfaces in the armory as indicated and in accordance to instructions published by the Region south Industrial Hygiene Bureau. Surfaces selected were in areas where lead contamination is suspected because of small firearms cleaning activities or the presence of a renovated, inactive, or closed indoor firing range (IFR). The instructions published by Region South National Guard Bureau required the use of ghost wipes to wipe one square foot of surface area. Samples were then placed in a sealed plastic bag and sent for analysis to AES laboratory, which is an American Industrial Hygiene Association (AIHA) Accredited laboratory. Noise readings were measured using a Quest Sound Level Meter Model 2100 Serial Number DAG010033 calibrated 6 JUN 2011. All noise measurements were area readings. Illumination readings were collected using a Extech light meter. Illumination readings were taken on work surfaces and approximately four feet from the floor.

Jasper Armory

Survey Date: 07 March 2012

FINDINGS and DISCUSSION:

The Point of Contact during the survey was SFC Jeff White.

Lead Wipe Samples: Eight wipe samples were collected from select surfaces as listed in the table below:

Sample Number	Sample Location	Micrograms of lead (ug) per square foot
0	Center Drill Hall Floor	<20
02	Top Left Drill Hall Floor	<20
03	Top Right Drill Hall Floor	<20
04	Bottom Right Drill Hall Floor	<20
05	Bottom Left Drill Hall Floor	<20
01	Firing Line	<20
02	IFR Floor- Hall area	<20
03	IFR Floor by P.I.	<20
WF	Field Blank.	

Sampling results shows levels well below the recommended limit of 200 micrograms per square foot. No further action is required. 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; 250 micrograms of lead in dust per square foot on interior window sills, and 400 parts per million (ppm) of lead in bare soil in children's play areas or 1200 ppm average for bare soil in the rest of the yard. This standard is a major effort by the EPA to identify dangerous levels of lead in paint, dust and soil in order to protect children from lead poisoning. The National Guard Bureau recommends a limit of 200 micrograms per square foot for surface contamination. The laboratory report and chain of custody forms are attached in Appendices B and C.

Asbestos Suspect Building Material: There were no damaged suspect asbestos containing materials identified in this facility.

Jasper Armory

Survey Date: 07 March 2012

The laboratory report and chain of custody forms are attached in Appendices B and C.

Noise Survey: Based on observations during the walkthrough survey, no sources of excessive noise were identified and therefore no area noise readings were collected. Noise levels are likely to be well below the Occupational Safety and Health Administration (OSHA) regulated limit of 90 dBA and the Army recommended limit of 85 dBA.

Illumination Survey: Lighting levels throughout the Armory ranged between 1 foot-candles to greater than 200 foot-candles. Specific readings were as follows:

Area	Maximum Reading (foot-candles)	Minimum Reading (foot-candles)	Average Readings (foot-candles)
Supply Office	60	20	31
Training Room	118	36	95
Orderly Room	132	15	120
Large Classroom	188	31	66
Small Classroom	141	25	78
Drill Hall	180	44	78
Storage Area/IFR	22	9	32
Recruiter's Office	68	40	55
Kitchen	10	9	25
NBC Rooms	30	11	12
Supply Room	16	2	15

Average readings are within the Army Design Guide (DG415-2) minimum illumination level of 50 foot-candle for office area and 20 foot-candles for parts storage/supply. The American National Standard Institute (ANSI) recommends a minimum illumination level of 50 to 100 foot-candles for office work, 20 to 50 for general lighting. Luminance depends on various factors including the task to be performed, the age of the individual, and the surroundings. Luminance of 50 to 100 foot-candles is recommended for performance of visual tasks of medium contrast or small size such as reading pencil handwriting and poorly printed or reproduced material. Depending on the type of display, background luminance of 30 to 60 foot-candles is recommended for VDT work. Replacing light bulbs with higher wattage will increase lighting levels. Replacing burnt out light bulbs and cleaning the light fixture should improve the lighting levels. Some light bulbs in the storage rooms were out.

Jasper Armory

Survey Date: 07 March 2012

Heating Ventilating and Air Conditioning (HVAC) The Heating Ventilating and Air-Conditioning (HVAC) System for the Armory consisted of 2 forced air units located in a mechanical room. The system is capable to deliver outside makeup air to the occupied space. The return air plenum is common to all units and it is located under the units. No complaints of indoor air quality issues were documented or communicated with the POC.

Recommendation:

Replace blown bulbs with new ones.

Technical Assistance: For technical assistance regarding information found in this report or the performed survey please contact SGT **Non-Responsive** Regional Industrial Hygiene Specialist at the NGB ARNG Region South Industrial Hygiene Office at 205-808-3340.

Non-Responsive

Industrial Hygiene Technician

Report Date: 20 March 2012

Page 5

APPENDIX A

Analytical Environmental Sciences, Inc.

Date: 10 May 7

Lab Order: 120754
 Client: National Guard Bureau Region-Texas TH
 Project: Air Force Activity D-14
 Material: Wipes
 Date Received: 04/20/12 10:00 AM
 LEAD ON WIPES (M91007082)
 NIOSH

Reference ID	Client Sample ID	Matrix	Units	Recovery Limit	Q1	Q2	Units Collected	Date Analyzed	Analysis
120754-001A	Control Blank Field 1	BBL	mg Total	20	1		04/04/2012	04/11/2012	none
120754-002A	Target Blank Field 1	BBL	mg Total	20	1		04/04/2012	04/11/2012	none
120754-003A	Target Blank Field 1	BBL	mg Total	20	1		04/04/2012	04/11/2012	none
120754-004A	Bottom R. Dr. 1.161 Area	BBL	mg Total	20	1		04/04/2012	04/11/2012	none
120754-005A	Bottom R. Dr. 1.161 Area	BBL	mg Total	20	1		04/04/2012	04/11/2012	none

Copy to: 1 file - see Remarks in the Report by Lab
 1 file - see Remarks in the Report by Lab
 1 file - see Remarks in the Report by Lab
 Page 4 of 4

Analytical Environmental Services, Inc.

Date: 13-Mar-12

Lab Order: 120476A

Client: National Guard Bureau Region South Hq

LEAD ON WIPES (N9100/7062)

Project: Copper Arsenic

N7062

Matrix: Wipe

Date Received: 1-4-2012 11:50:00 AM

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DL	QAL	Date Collected	Date Analyzed	Analyst
120476S-001A	Living Line	NDL	ug Total	20	1		01-07-2012	03-12-2012	ACW
120476S-012A	HR 2nd Lt Fish Area	ND	ug Total	20	1		01-07-2012	03-12-2012	ACW
120476S-003A	HR 1st Lt by the	ND	ug Total	20	1		01-07-2012	03-12-2012	ACW

Qualifiers: NDL Not Detected by the Reporting Limit

DL Detection Limit

1 Analytical Method used in the analysis is listed below.

Results are subject to the following qualifications:

Page 4 of 6

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APPENDIX B

[illegible]

[illegible]

APPENDIX C

REFERENCES

1. American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice, 27th Edition, 2010.
2. American National Standards Institute (ANSI), /Illuminating Engineering Society (IES), Industrial Lighting 2007.
3. American National Standards Institute, Z358.1-1998. Emergency Eyewash and Shower Equipment 1998.
4. Army Regulation (AR) 11-34, The Army Respiratory Protection Program, 1990
5. Army Regulation (AR) 40-5, Preventative Medicine, 22 July 2005.
6. Army Regulation (AR) 385-10, The Army Safety Program, 29 February 2000.
7. National Safety Council, Fundamentals of Industrial Hygiene, 5th edition, 2002.
8. NGR 385-10, Army National Guard Safety and Occupational Health Program, 12 September 2008.
9. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
10. Title 29, Code Of Federal Regulations (CFR), 1999, revision, Part 1910, Occupational Safety and Health Standards.

CF:

Office of the CFMO, ATTN CO [Non-Responsive] Deputy CFMO, 1720 Congressman Dickinson Dr Montgomery, AL 36109

Office of the Adjutant General, ATTN LTC [Non-Responsive] Alabama State Safety Office Director, PO BOX 3711, Montgomery, AL 36109

Office of State Surgeon, ATTN MAJ [Non-Responsive] Alabama State Surgeon Office, 5300 57th St N Birmingham, AL 35217

Office of the State Surgeon, ATTN MAJ [Non-Responsive] Alabama Occupational Health Specialist, 1750 Congressman Dickinson Drive, Montgomery, AL 36109

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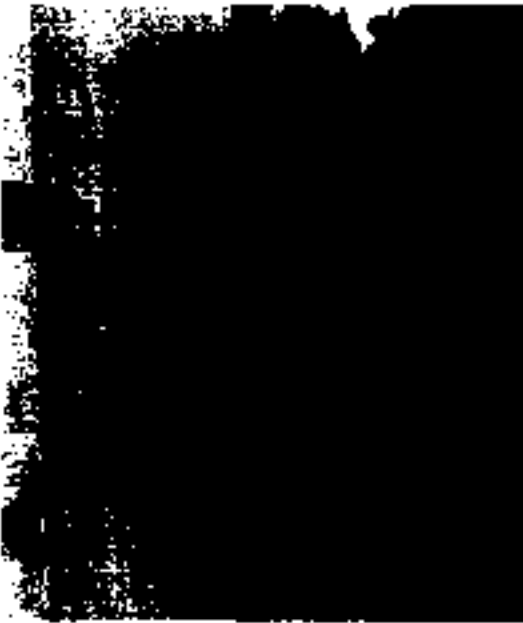
APPENDIX D



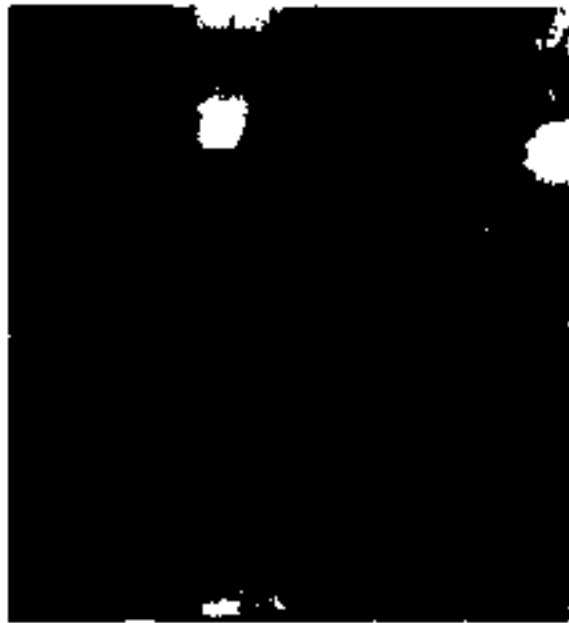
DRILL HALL



CONVERTED IFR



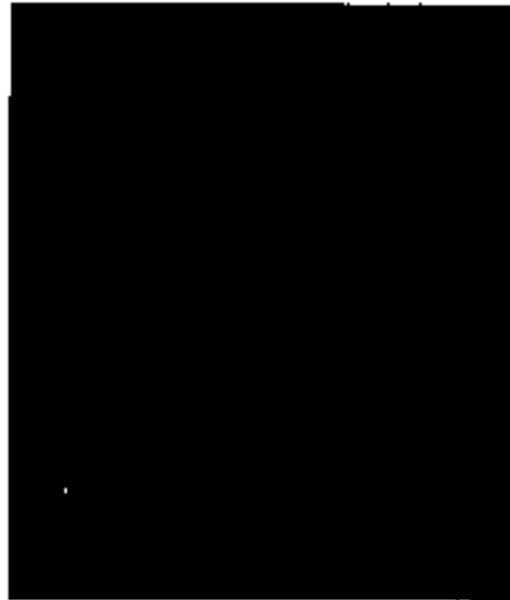
FIRE EXTINGUISHER PROPERLY SERVICED



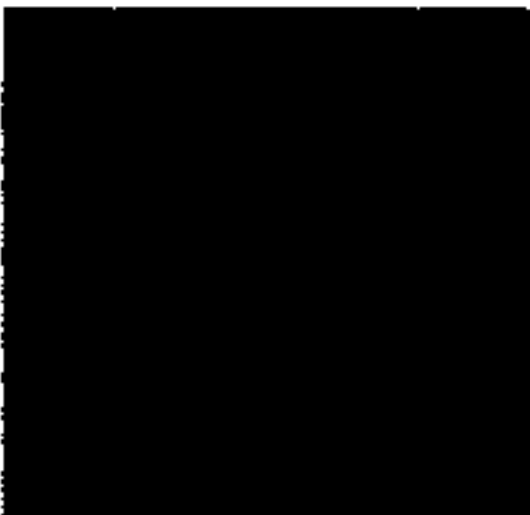
SUPPLY ROOM



VAULT



ADMIN STORAGE



HVAC SYSTEM



FUEL STORAGE



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

NGB-ARS-SEIH

3 April 2007

MEMORANDUM THRU COL **Non-Responsive** Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: LT **Non-Responsive** Facility Supervisor, 1625 Pocato Road, Oneonta, AL 35121.

SUBJECT: Industrial Hygiene Survey of the Oneonta Armory.

1. References.

- a. Report completed 19 February 2007, Industrial Hygiene report for the Oneonta Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC. [Non-Responsive] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at the FT. Payne Armory.

b. b. Ms [Non-Responsive] of LAE Consulting conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations. Contact the Regional Southeast Industrial Hygiene Office once the Armory renovation is complete. Reschedule a baseline Industrial Hygiene survey once renovation is complete and is reoccupied. Request lead swipe sampling be conducted in the converted indoor firing range.

5. If additional information is needed about the report, please contact [Non-Responsive] Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ [Non-Responsive] Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC [Non-Responsive] Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

LAE Consulting

24 February 2007

MEMORANDUM FOR: Oneonta Armory, ATTN: LT [REDACTED] 1625 Pocato Road, Oneonta, Alabama 35121

SUBJECT: Industrial Hygiene Survey of Oneonta National Guard Armory, Oneonta, Alabama

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 Oneonta National Guard Armory, Oneonta, Alabama

2. 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 the Oneonta National Guard Armory Oneonta, Alabama on 16 February 2007. The purpose of the survey was to conduct a baseline survey of the Armory.

3. Facility Description. The Oneonta Armory is under construction. The move in date is between May and September 2007. Construction is almost complete of a separate building and the addition to the original Armory. Access through the buildings was limited, due to the rules and instructions set by the construction company. A representative from the Armory stated that 208th Chemical Company will move in the newly constructed building September 2007. The original Armory will house a Military Police company from Springville, Alabama. (Photos are within the enclosure of the report)

4. Findings. Two walls were added converted the indoor firing range into three separate spaces. One space, at the former pit and firing line will serve as a weapon simulation room; a small area before the firing line is a hallway; and the firing line area now houses the Heating, Ventilation and Air conditioning systems.

5. Technical Assistance. For technical assistance, regarding information found in this report, please contact **Non-Responsive** of the Southeast Regional Industrial Hygiene Office at (404)559-4174.

Encl

1. Facility Photo

Non-Responsive

LAE Consulting

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

Page 2

SUBJECT: Industrial Hygiene Survey of Oneonta National Guard Armory, Oneonta, Alabama

6. Recommendations.

a. Recommend a baseline industrial hygiene survey be conducted after the Armory is occupied.

b. Recommend the Alabama Safety and Occupational Health office collect additional lead wipe samples within the areas that were occupied by the range. Sampling will ensure that lead is encapsulated has not leached from the paint.

1-17-4 consulting
1216 Swamp and Piney Point, New York, Maryland 21144
Telephone: 410-551-2717

Page 8



Oneonta Armory, Oneonta, Alabama



Oneonta Armory, Oneonta, Alabama



View of former range (downrange)



View of former range (uprange)



View of one of two walls installed separating the former range. Currently converted into a hallway



View of second wall installed making a room to house the HVAC system. Area was the former firing line

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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, HQS 111th and 3203rd OD
CO, ATTN: MAJ. [REDACTED] 30 Consumer Ave., Opelika, Alabama, 36801.

SUBJECT: Industrial Hygiene Survey of the Ft. Alfred C. Harrison National Guard
Armory, Opelika, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.

- b. Mrs. [REDACTED] of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.

b. Use the report to help in correcting all deficiencies noted by the contractor.

c. Discuss the high lead levels in the Indoor Firing Range (IFR) that has been converted to a storage room with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Remove the backstop and sand that is still in the converted storage room.

d. Submit a work request to fix the roof leak and then remove the mold.

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

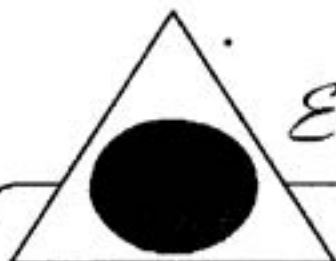
f. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the contractors report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ **Non-Responsive** Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: HQS 111th and 3203rd OD CO. Attn: Commander, Ft Alfred C. Harrison National guard Armory, 30 Consumer Ave., Opelika, Alabama 36801.

SUBJECT: Industrial Hygiene Survey for the Ft. Alfred C. Harrison National Guard Armory, Opelika, Alabama.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Alfred C. Harrison National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Harrison Armory. An interview was conducted with Major [REDACTED] to gather background and historical information relative to the various operations at the Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses. Appendix E includes laboratory results and Appendix F includes list of all personnel working in the Armory.

3. Background. At the request of Mr. [REDACTED] of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Alfred C. Harrison National Guard Armory in Opelika, Alabama on June 10, 2004 by [REDACTED] Industrial Hygienist.

SUBJECT: Industrial Hygiene Survey for the Ft. Alfred C. Harrison National Guard Armory, Opelika, Alabama.

4. Facility Description. This facility houses the HQS 111th and the 3203rd OD CO. A total of eleven full time employees work in the Ft. Alfred C. Harrison Armory. The armory is utilized by supply and administrative personnel during the week (Monday through Friday) and it is utilized for Guard drill on the weekends. The physical structure is a one story dark brown brick building with gray trim windows. The building was constructed in 1979. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Inactive Firing Range	3203 rd Admin offices
111 th Supply Room/Vault	Mechanical Room
3203 rd Supply Room/Vault	22 nd BN Retention
Class Rooms	Recruiters Office
Drill Hall	Male & Female Latrines
Kitchen	
111 th Admin offices	

5. Health Hazard Inventory Module (HHIM) & Risk Assessment Codes - The results of the walk through survey were entered into a health hazard inventory module (HHIM) Industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 8055.1 and are reproduced in Appendix C.
6. Findings.
- A. Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room - An initial walk through of the facility revealed that there was an inactive firing range located on the premises. A vehicle maintenance operation was not present and an inactive boiler room was not present.
- B. Suspect Asbestos Containing Materials
- (1) There were no damaged suspect asbestos containing materials identified in this facility.
- (2.) Other observations. The interior walls of the armory were not suspect asbestos containing however, due to the leaking roof, the walls were buckled from moisture in many of the offices and white mold was also observed growing in some of the offices. The interview also revealed that the drain was constantly clogged in the mechanical room due to a combination of condensation and rain. The standing water presented a hazard due to the close proximity of electrical wires. The entrance door to mechanical room was rusted and did not close completely. The interview also revealed that the emergency lights did not work.

SUBJECT: Industrial Hygiene Survey for the Ft. Alfred C. Harrison National Guard Armory, Opelika, Alabama.

- C. Supply Room – There are two Supply rooms and Vaults located in this facility. The first supply operation is supported by the 111th OD CO and the second supply operation is supported by the 3203rd OD CO. The 111th supply sergeant is MSG **Non-Responsive** and the 3203rd supply sergeant is SSG **Non-Responsive**. The two supply operations are almost identical in function and design. The supply sergeants are responsible for ordering, distributing, and storing military supplies and equipment. The room is secured by lock and key. The ULLS and RCAS computer systems are used in both operations. Both supply sergeants utilize the computers an average of four to five hours per day. The employees had no ergonomic concerns or complaints. A flammable cabinet was present in the 111th operation. A hazardous material inventory list was available as were the material safety data sheets.
- D. Vault – Both the 111th and the 3203rd Companies have a security vault located within the supply room. The vault is used to stored military weapons and a small amount of security ammunition. Radioactive equipment such as chemical detectors are stored in the NBC room. Weapons repair or maintenance is not performed in the vault. There is only one means of entry and egress and no independent ventilation is present in this operation.
- E. Illumination survey - An illumination survey was conducted in four areas at this facility. The illumination levels in two of the areas surveyed were not within the American National Standards Institute (ANSI) recommended minimum illumination levels.

The illumination levels in the survey can be seen in table II.

TABLE II
Illumination Survey

Location	Illumination Level (ftc)	ANSI Minimum Requirements (ftc)	DG 412-2 Minimum Requirements (ftc)
SSG Non-Responsive desk	42.0	50 – 100	50
SSG Non-Responsive desk	65.0	50 – 100	50
Major Non-Responsive office	39.0	50 – 100	50
SFC Non-Responsive Desk	88.0	50 - 100	50

Notes: ANSI office illumination depending on the task is 50 ftc for general desk work and 90 ftc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft Alfred C. Harrison National Guard Armory, Opelika, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel for formation and as a Mess hall. The floor is composed of concrete and the ceiling is composed of a compressed seaweed type material (Tectum) that is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq.ft. guideline as required by NG PAM (AR) 385-16.
- G. Inactive Firing Range – The Ft Harrison Armory is equipped with an inactive indoor firing range that is now used for storage space. The bullet backstop and the sand pit were left in the operation however, the area is now caged and the area in front of the backstop has been paneled and carpeted. An interview revealed that the firing range was not cleaned or decommissioned. As required, lead wipe samples were collected from the inactive firing range. Laboratory results revealed that one of the samples taken from the firing range were found to be above 200 micrograms/sq. ft. guidelines as required by NG PAM(AR)385-16.
- H. Kitchen – The kitchen is adjacent to the armory floor and is fully functional. The kitchen is used during drill weekend. Housekeeping was adequate and there were no signs of insects or pests.

SUBJECT: Industrial Hygiene Survey for the Ft. Alfred C. Harrison National Guard Armory, Opelika, Alabama.

Recommendations

1. Lighting should be upgraded in all areas that were indicated as deficient.
2. As required by NG PAM (AR) 385-16, the inactive firing range should be decontaminated and clearance testing should be performed to verify the effectiveness of the cleanup.
3. Maintenance should be performed in the mechanical room to correct the electrical hazard and the problem with the door.
4. The emergency lighting system should also be repaired in the Armory.

SUBJECT: Industrial Hygiene Survey for the Ft. Alfred C. Harrison National Guard Armory, Opelika, Alabama.

Ft. Harrison National Guard Armory
Lead Wipe Sample Analysis
Appendix E

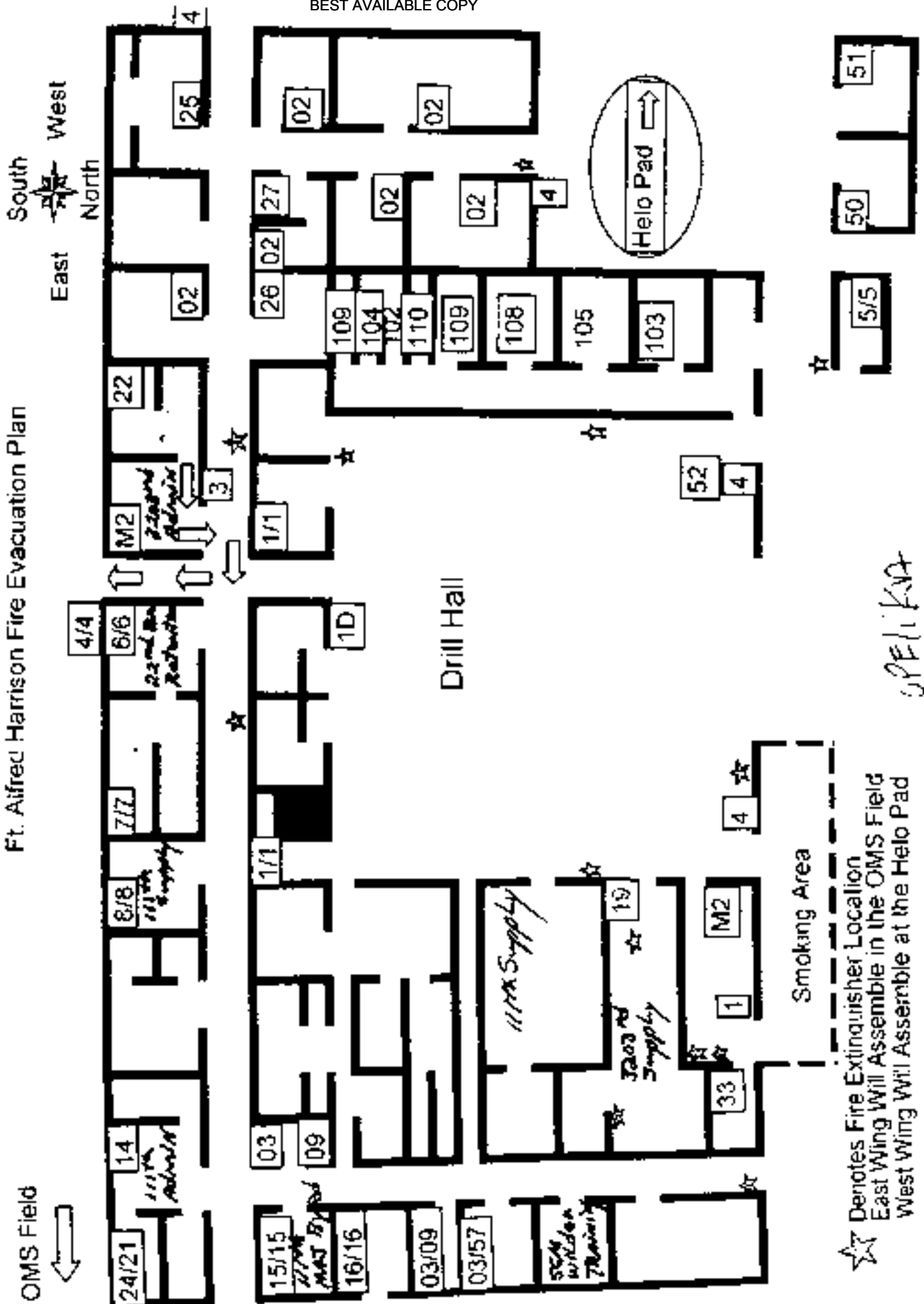
Sample No.	Location	Type Analysis	Micrograms / cubic ft ug/m3
OP-01	Drill Fl., near overhead door	Lead	BRL
OP-02	Drill Fl. Center of Floor	Lead	BRL
OP-03	Drill Fl., @ serving station	Lead	BRL
OP-04	Kitchen, at entrance	Lead	BRL
OP-05	Blank	Lead	BRL
OP-06	Recruiting Office	Lead	BRL
OP-07	IFR, Bullet backstop	Lead	39900
OP-08	IFR, Fl. in front of backstop	Lead	BRL
OP-09	IFR, wipe from stored items	Lead	108
OP-10	Rear wall next to entrance./exit	Lead	BRL
OP-11	Blank	Lead	BRL

* BRL - below the reporting level

Sample no.	Location	Type of analysis	Ug/sq ft
D-12	Sand from pit	Lead	130
D-13	Sand from pit	Lead	8170

APPENDIX A

O/S Field



Denotes Fire Extinguisher Location
East Wing Will Assemble in the OMS Field
West Wing Will Assemble at the Helo Pad

09/11/20

APPENDIX B





APPENDIX C

MEDDAC
107 E. Main St.
St. Louis, MO 63102
314-241-4000
FAX 314-241-4001
www.meddac.com

[illegible]

Legend

[illegible]

Personal data provided by the facility is allocated to this form

61-2111-107

Algorithms for constant or polynomially recursive, and iterated conditional forms

Operation described is, **OTH**.

2. After Operations: LOA Memory

3. Vehicle are driven onto the floor and weapons are also cleared off the floor.

4. Used Diaper Samples were taken and the results revealed the following:

01000
 Location: AA
 Survey Date: 09/06/10
 Year: 09
 Month: 06
 Day: 10
 MACOM: WG
 Building Number: FTACHARRIS
 Sub-MACOM: RAC
 Unit/Organization: 30 CONSUMER AVE
 3601 KA
 Room Number: 3203DORD
 ADMIN

Supervisor: Mr. [redacted]
 Supervisor or Point of Contact Telephone Number: 334 745 0090
 Lab Hoods: [X]
 Vapor Degreasers: [X]
 Spray Booths: [X]
 Open Surface Tanks: [X]
 Frequency (hrs/day): [] [] []
 No. MIL: [X]
 No. CIVs: [] []
 Contractors: [X]
 No. LOCs: [X]

Controls present (if > 6, continue in comments): [25]
 Evaluation [25 char max per line]
 Unit Code
 Controls Required [25 char max per line]
 Manufacturer's Description [10 char max]
 NIOSH TC# or foreign equiv. [10 char max]

Gloves
 e R U
 acid
 cold surfaces
 hot surfaces
 NBC agents
 oil
 solvents
 surgical gloves
 leather/cotton
 other
 e R U
 abrasive blasting hood
 disposable
 full face air purifying
 1/2 face air purifying
 powered air purifying
 1/4 face air purifying
 self-contained
 other
 e R U
 airline
 e R U
Head and Feet
 cold weather boots/shirt
 hard hats
 impervious boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other
 other
 e R U
Body
 aprons
 cold weather clothing
 coveralls
 full body suit
 heat reflective vest/suit
 safety belt/harness
 special purpose clothing
 other
 other
 e R U
Hearing
 (>85-100dBA steady) earplugs
 helmets with muffs
 muffs alone
 (100-110) multiple plug comb
 muffs and earplugs
 (110 or >) with time limit
 other
 other
 e R U
Face and Face
 chemical splash
 full face shield
 chemical safety impact
 safety impact
 welding helmet
 sunglasses
 welding goggles/glasses
 laser eye protection
 other
 other
 e R U
Reminders: ergonomics - dermalitis - physical agents - flammable storage
 EYE (permanent) - EYE (portable) - SHW - GMV - LEV
 evaluator's recommendation or agreement
 MEDDAC FORM 609-R

BEST AVAILABLE COPY

BEST AVAILABLE COPY

Hazard Description

Last Name

[illegible]

☐ Personnel data provided by the facility is attached to this form.

Comments

Remember to comment on problems, recommendations, and needed control items.

2. Operation described is : Add

2. Other operations: Off, Man

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (AL)
Released by National Guard Bureau
Page 547 of 759

MEDDAC (P2 MEADS) FORM 609-R
1 MAY 85

Hazard Description


[illegible]

Fast Forward

Non-Responsive

[illegible]

Non-Responsive



MI	Sex	Category
1	1	1
2	1	1
3	1	1
4	1	1
5	1	1
6	1	1
7	1	1
8	1	1
9	1	1
10	1	1
11	1	1
12	1	1
13	1	1
14	1	1
15	1	1
16	1	1
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80	1	1
81	1	1
82	1	1
83	1	1
84	1	1
85	1	1
86	1	1
87	1	1
88	1	1
89	1	1
90	1	1
91	1	1
92	1	1
93	1	1
94	1	1
95	1	1
96	1	1
97	1	1
98	1	1
99	1	1
100	1	1

BEST AVAILABLE COPY

Personnel data provided by the facility is attached to this form

Remember to comment on problems, recommendations, and needed control items

2. Other operations: off, MAN.

MEDDAC IF I NEED IT
(MAY BE) **FORM 609-R**

Building Number **FTACHARRISON** Room **3203** **Supply**
 Sub-MACOM **XX** RAC **3** Unit/Organization **30 CONSUMER**
 Survey Date **04/06/10** MACOM **WG**
 Supervisor **SA SAH** Ms. ☐ Frequency (hrs/day) ☐ No. CIVs ☐ No. MIL ☒ Contractors ☒ No. LOCs ☒
 Supervisor or Point of Contact Telephone Number **334 345 0090** DSN ☒ Commercial ☒
 Lab Hoods ☒ Vapor Degreasers ☒ Open Surface Tanks ☒ Ventilation Units ☒
 Controls present (if > 6, continue in comments)(25)

Unit Code **220 FTK** Controls Required (25 char max per line)
 Evaluation (25 char max per line) **2026 FTK** Manufacturer's Description (10 char max) **NIOSH TC# or foreign equiv. (10 char max)**
Lights
Center
Storage area


Eyes and Face **e R U** Hearing **e R U** Body **e R U** Head and Feet **e R U**
 chemical splash full face shield chemical safety impact safety impact welding helmet sunglasses goggles/glasses laser eye protection
 cold surfaces hot surfaces NBC agents oil solvents surgical gloves leather/cotton other
 abrasive blasting hood disposable full face air purifying 1/2 face air purifying powered air purifying 1/4 face air purifying self-contained other
 aprons cold weather clothing coveralls full body suit heat reflective vest/suit safety belt/harness special purpose clothing other
 cold weather boots/shoes hard hats impermeable boots safety shoes (conductive) safety shoes (nonconductive) other other other
 ACO ADM DSA DSN LAB LCK
 RAD ECB EPL PHS SPR VRL

Reminders: ergonomics - dermalitis - physical agents - flammable storage
 EYE (permanent) - EYE (portable) - SHW - GMV - LEV

MEDDAC (P) MEDAC 1 MAY 95 FORM 609-R

[illegible]

Last Name



First Name

A blank sheet of graph paper with a grid pattern. The grid consists of 10 columns and 20 rows of small squares. A black rectangular redaction mark covers the top right corner of the page, obscuring approximately 10 columns and 5 rows of the grid.

Category

Personnel data provided by the facility is attached to this form

Remember to comment on problems, recommendations and needed cost reductions.

1. Operation described is: SALT

2. Other operations: MAN, LOA

3. Variable Cabinet present in two operations, A HTML and MS OS' case available:

f. No radioactive equipment is stored in this area.

MEDDAC (FT HEADS) FORM 609-R

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

Special Security Handling or Other Unique Handling

Last Name

First Name

MI

Sex

Category

BEST AVAILABLE COPY

Personnel data provided by the facility is attached to this form

Comments

Handled in control of primary, secondary, and needed control items

1. Operation described: IFR, Inactive firing range
2. Other operations: SAT, MAN, LOA
3. This operation is presently used for Storage Space
4. Lead wife Sample taken inside this operation revealed the following

Lead dust

APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2800
31 January 1994

NG PAM (AR) 385-15
ANGPAM 91-101

Safety

GUIDELINES FOR CONVERTING INDOOR FIRING RANGES TO OTHER USES

Synopsis. This is a new pamphlet. This guidance prescribes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. This guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulations/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVN-5).

Impact on Heat Warning System. This guidance does not contain information that affects the Heat Warning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau, Attn: NGB-AVN-51, 111 South George Mason Drive, Arlington VA 22204-1382.

Distribution. Distribution of this publication is made in accordance with the requirements on DA Form 12-09-E.

CONTENTS (Listed by paragraph numbers)

	Para
Purpose	1
References	2
Explanation of abbreviations and terms	3
Policy and procedures	4
Goal	5
Background	6
Wipe Sample Media	7
Wipe Sampling Protocol	8
Range Cleaning Instructions	9
Cleaning Stored Contaminated Equipment	10
Contaminated Sand and Lead Waste	11
Medical Surveillance	12
Worker Education	13
Personal Protective Equipment	14
Point of Contact	15

Appendices

- A. Sampling Strategy for Collection of Wipe Samples
- B. Interpretation of Sample Results (Prior to Cleaning)
- C. Interpretation of Sample Results (After Cleaning)
- D. OSHA Instruction CPL 2-2.208
- E. Where to Purchase Sample Media and Containers
- F. ASHA Form 8-R (Bulk Sample Data)
- G. Instructions to Complete AEMF Form 8-R
- H. Examples of Computation of Lead Level from Wipe Sample Results
- I. Supporting Laboratories and Areas Served

Glossary

1. Purpose

This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.

2. References

Related publications are listed below.

a. ODDI 8055 (Department of Defense Occupational Safety and Health (OSH) Program).

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

c. AR 40-5 (Preventive Medicine).

d. NGR (AR) 385-15 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).

e. TB MED 502 (Occupational and Environmental Health Respiratory Protection Program).

f. USAEHA TB 141 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).

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

21 January 1974

HG Part (AR) 385.12-ANCPAM 91.101

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

B-1 200 micrograms/eq ft or LESS

If all sample results are 200 micrograms/eq ft or less, the range can be converted and/or used for any purpose.

B-2 BETWEEN 201 and 200,000 micrograms/eq ft

Range must be decontaminated. Continue with cleaning instructions listed in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

B-3 ABOVE 200,000 micrograms/eq ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/eq ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/eq ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/eq ft limit.

B-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substratum. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

APPENDIX C INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

C-1 200 micrograms/eq ft or LESS

If all sample results are less than 200 micrograms/eq ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substratum.

C-2 ABOVE 200 micrograms/eq ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/eq ft level. If all sample results meet this criteria, a contrasting color of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of known equipment and food is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE that if your original wet sample results were, e.g., 175,000 ug/eq ft then you would have to reduce the lead level below 13,125 ug/eq ft. This would meet the 75 percent reduction criteria. However, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will allow the latex paint to adhere to the substratum. If the paint peels, falls to the floor and is crushed over a period of time, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the converted range for signs of peeling paint. Paint chips can be analyzed for lead content. DO NOT IGNORE PEELING PAINT IN A CONVERTED INDOOR FIRING RANGE.

APPENDIX E

Analytical Environmental Services, Inc.

Date: 7/26/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region: South IS
 Project: Lead Analysis
 Delivery Order
 PO No:

Lab Order: 0407411
 Date Received: 7/12/2004 10:25
 Method: Wipe

Laboratory ID	Client Sample ID	Result	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0407411-0001A	Opelika OP-01	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0002A	Opelika OP-02	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0003A	Opelika OP-03	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0004A	Opelika OP-04	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0005A	Opelika OP-05	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0006A	Opelika OP-06	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0007A	Opelika OP-07	399000	ug/ft ²	20.0	13.02	6/30/2004	7/14/2004	EM
0407411-0008A	Opelika OP-08	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0009A	Opelika OP-09	105	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0010A	Opelika OP-10	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM
0407411-0011A	Opelika OP-11	BRL	ug/ft ²	20.0	1	6/30/2004	7/14/2004	EM

Q-1234-01

Q-1234-01 is the Reporting Unit

Q-1234-01 is the Reporting Unit

Analytical Environmental Services, Inc.

Date: 10-21-04

CLIENT:	National Guard Bureau Region-South (H)	Client Sample ID:	Opobas OP-12
Lab Order:	0407412	Tag Number:	
Project:	Lead Analysis	Collection Date:	6/30/2004
Lab ID:	0407412-0001	Matrix:	SOIL

Analytes	Result	Limit Qual Units	BatchID	DF	Date Analyzed
METALS, TOTAL		SW6010B (SW3080B)			Analyte: CdM
Lead	130	3.06 mg/Kg	47811	1	7/13/2004 7:08:06 PM

Qualifiers:	A	Value exceeds data from determining limit	B	Analyte detected at the method limit
	SSL	Below Reporting Limit	E	Value above quantitation limit
	H	Holdings apply for preparation or analysis exception	J	Analyte detected below quantitation limit
	N	Analyte not NELAC certified	JR	NELAC analysis certification pending
	Rpt 12941	Reporting Limit	S	Spike recovery outside accepted recovery range

Page 5 of 10

Analytical Environmental Services, Inc.

Date: 20-Jul-04

CLIENT: National Guard Bureau Region South IH
 Lab Order: 0407411
 Project: Lead Analysis
 Lab ID: 0407411-095A

Client Sample ID: Optika OP-13
 Tag Number:
 Collection Date: 6/30/2004
 Matrix: SOIL

Analytes	Result	Limit	Qual	Units	Batch ID	DF	Date Analyzed
METALS, TOTAL		Quantitation		(SW3050B)			Analyst: CDW
Lead	8170	400		mg/kg	47814	13	7/14/2004 3:01:00 PM

Qualifiers:	A	Value exceeds Maximum Contaminant Level	B	Analyte detected in the national Method Blank
	BRL	Below Reporting Limit	C	Value above quantitation limits
	M	Holdup time for preparation of analysis exceeded	D	Analyte detected below quantitation limits
	N	Analyte not NEI, AC, or RC	E	NEI, AC, or RC analysis compliance pending
Page Limits	Reporting Limit		F	Spill Recovery outside accepted recovery limits

APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Alfred C. Harrison National Guard Armory, Opelika, Alabama.

Fort Alfred C. Harrison Armory
Employee List

1	Non-Responsive	MAJ
2		MAJ
3		CSM
4		MSG
5		SFC
6		SFC
7		SFC
8		SSG
9		SGT
10		SPC
11		SPC

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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, Company HHC 1st 131st
Armor Battalion, Attn: SGT **Non-Responsive** 3971 US 231 South, Ozark, Alabama
36360.

SUBJECT: Industrial Hygiene Survey of the Ft. Henry B. Steagull National Guard
Armory, Ozark, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.

b. Mrs. **Non-Responsive** of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.

b. Use the report to help in correcting all deficiencies noted by the contractor.

c. Discuss the high lead levels on the bullet backstop and the items stored in the Indoor Firing Range (IFR) with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Do not remove any items in the IFR until further sampling is conducted.

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

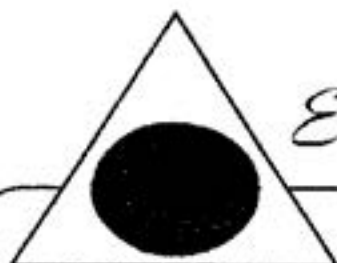
e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the contractors report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ **Non-Responsive** Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: Company HHC 1st 131(/131) Armor BN. Attn: Commander, Ft. Henry B. Steagull National Guard Armory, 3971 US 231 South, Ozark, Alabama 36360.

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Steagull National Guard Armory, Ozark, Al.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Henry B. Steagull National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Henry B. Steagull Armory. An interview was conducted with SGT **Non-Responsive** to gather background and historical information relative to the various operations at the Ft. Henry B. Steagull Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses. Appendix E includes laboratory results and Appendix F includes a list of all personnel working in the Armory.

3. Background. At the request of Mr. **Non-Responsive** of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Henry B. Steagull National Guard Armory in Ozark, Alabama on June 9, 2004 by **Industrial Hygienist**.

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Steagull National Guard Armory, Ozark, Alabama.

4. Facility Description. This facility houses HHC 1st of the 131 (1/131) Armor BN. Seven full time employees work in the Ft. Henry B. Steagull Armory. The armory is utilized by supply, administrative and training personnel during the week (Monday through Friday) and is utilized for Guard drill on the weekends. The physical structure is a two story red brick building with arched roof and gray trim. The building was constructed in 1958. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Admin Offices	Men's Latrine
Supply Room/Vault	Women's Latrine
Communication room	Inactive firing range
Kitchen	Library recruiting office
Class Rooms	
Locker room	

5. Health Hazard Inventory Module (HHIM) & Risk Assessment Codes - The results of the walk through survey were entered into a health hazard inventory module (HHIM) industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 8055.1 and are reproduced in Appendix C.
6. Findings.
- A. Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room - An initial walk through of the facility revealed that there was an inactive firing range located on the premises. A vehicle maintenance operation was present and an inactive boiler room was not present.
- B. Suspect Asbestos Containing Materials
(1) There were no damaged suspect asbestos containing materials identified in this facility. The vinyl floor tile was replaced approximately ten years ago.

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Steagull National Guard Armory, Ozark, Alabama.

- C. Supply Room – The employee temporarily in charge of this operation is SGT McCall. SGT McCall works in this area during the week and on drill weekends. The employee is responsible for ordering, distributing and storing military supplies and equipment. An ULLS and a RCAS computer system are also utilized in this operation. SGT [REDACTED] uses the computer approximately four to five hours per day. The employee had no ergonomic concerns or complaints. A flammable cabinet was not present in the supply area.
- D. Vault – The vault is used to store military weapons. Entry into the vault is limited to SGT [REDACTED] on weekdays and on drill weekends. Weapons repair is not performed inside the vault nor is it meant for continuous occupancy. There is only one means of entry and egress and no independent ventilation is present in the vault. Equipment containing a radioactive source is stored in this operation. The appropriate signage warning of the hazard was present.
- E. Illumination survey - An illumination survey was conducted in seven areas at this facility. The illumination levels in four areas surveyed were below the American National Standards Institute (ANSI) recommended minimum illumination levels.

The illumination levels in the survey can be seen in table II.

TABLE II
Illumination Survey

Location	Illumination Level (ftc)	ANSI Minimum Requirements (ftc)	DG 412-2 Minimum Requirements (ftc)
SFC [REDACTED] office	39-45	50 – 100	50
CPT [REDACTED] office	74.2	50 – 100	50
SGM [REDACTED] office	35.8	50-100	50
SLT [REDACTED]	39-44	50-100	50
S-4 office	58.0	50-100	50
SFC [REDACTED] (recruiting)	35.0	50-100	50
SGT [REDACTED]	64.4	50-100	50

Notes: ANSI office illumination depending on the task is 50 ftc for general desk work and 90 ftc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Steagull National Guard Armory, Ozark, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel. The floor was composed of concrete and the ceiling is composed of 2x6 drop in ceiling tile that is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor and weapons are also cleaned in the area. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq.ft. guideline as required by NG PAM (AR) 385-18.
- G. Kitchen – The kitchen is adjacent to the drill floor and is fully functional. The kitchen is used during the drill weekend.
- H. Inactive Firing Range – The Ft. Steagull Armory is equipped with an inactive indoor firing range. An interview revealed that the firing range has not been cleaned or decommissioned. The inactive firing range is currently used for storage. As required, lead wipe samples were collected from the inactive firing range. Laboratory results revealed that two of the samples taken from the firing range were found to be above 200 micrograms/sq. ft. guidelines as required by NG PAM(AR)385-18.
- J. Vehicle Maintenance facility - The Vehicle Maintenance Operation is used by drill personnel on the weekends. There were four maintenance bays. A local exhaust ventilation system was present but was not functional. A non-functioning battery shop was present with an eye wash/deluge shower. The eye wash/deluge shower contained debris and dirt and had not been functionally tested for some time. A welding and a parts washer operation were also not present. Pneumatic tools were not used in the vehicle maintenance operation. Lighting ranged between 58-62 foot candles (FC) of illumination in the bays. A flammable cabinet was not present in this facility and paints and brake fluid were stored on a table.

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Staagull National Guard Armory, Ozark, Alabama.

Recommendations

1. Lighting should be upgraded in all areas where indicated as deficient.
2. Repair the non functional local exhaust system in the vehicle maintenance facility.
3. Remove any dirt and debris from the eye wash/deluge shower and perform regular testing to ensure the shower is functional.
4. As required by NG PAM (AR) 385-18, the inactive firing range should be decontaminated and clearance testing should be performed to verify the effectiveness of the cleanup.
5. All chemicals in this operation should be stored in a flammable cabinet

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Steagull National Guard Armory, Ozark, Alabama.

**Ft. Steagull National Guard Armory
Lead Wipe Sample Analysis
Appendix E**

Sample No.	Location	Type Analysis	Micrograms/ cubic ft ugm/ft ³
OZ-01	Bullet backstop	Lead	22.0
OZ-02	Front of bullet backstop	Lead	712.0
OZ-03	IFR stored items	Lead	693.0
OZ-04	Rear wall @ entrance./exit	Lead	BRL
OZ-05	Blank	Lead	BRL
OZ-06	Drill Fl., Near overhead door	Lead	20.0
OZ-07	Drill Fl. Center of Floor	Lead	BRL
OZ-08	Drill Fl., near kitchen entrance	Lead	BRL
OZ-09	Kitchen inside entrance	Lead	BRL
OZ-10	Blank	Lead	BRL
OZ-11	Supply Vent SGM's office	Lead	BRL

* BRL - below the reporting level

APPENDIX A

0-276K

FIRE EVACUATION DIAGRAM

STATION # 1 EXTINGUISHER: Use on Type A, B, C Fires
 # 2 Use on Type A, B, C Fires
 # 3 Use on Type A, B, C Fires
 # 4 Use on Type A, B, C Fires
 # 5 Use on Type A, B, C Fires

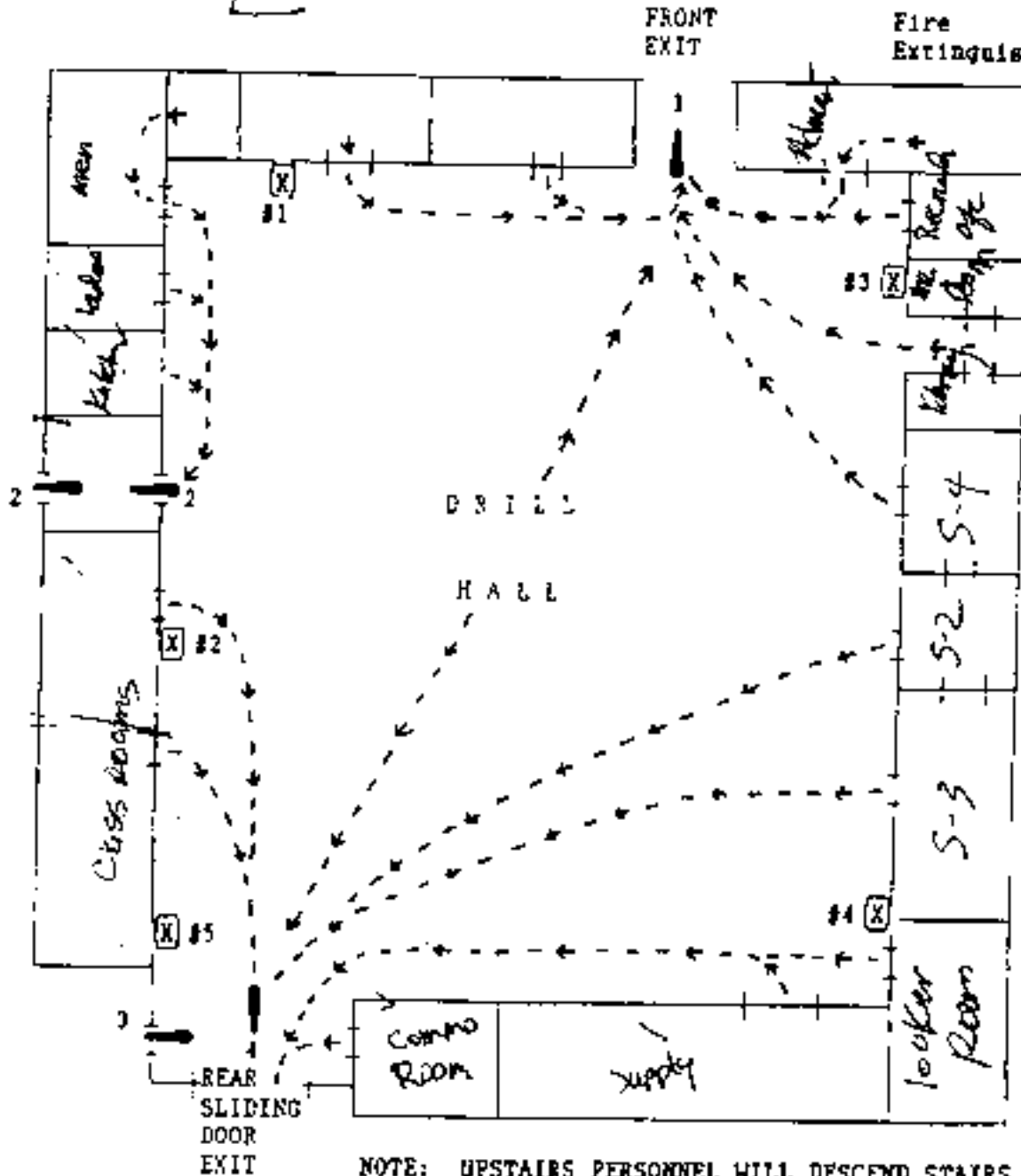
LEGEND:

Evacuation

Route = - - - - ->

Fire Exit =

Fire Extinguisher =



ENCLOSURE 1



APPENDIX B



APPENDIX C

07C20
 Location: WF IER
 Survey Date: 04/06/07
 Year: 04, Month: 06, Day: 07
 Sub-MACOM: NG
 RAC: 2
 Unit/Organization: 3971 US 23150
 Building Number: FT H B I S T e a g u l l
 Room: F I R I N G
 Range: 36360-9476
 0308K A496a ma
 Mr. [redacted]
 Supervisor: ☒ Ms. ☐
 Supervisor or Point of Contact Telephone Number: 334 774 0075
 Commercial: ☒
 Frequency (hrs/day): ☐ ☐ ☐
 No. CIVs: ☐ ☐
 No. MIL: ☒
 Contractors: ☒ ☒
 No. LOCs: ☒
 Lab Hoods: ☒
 Vapor Degreasers: ☒
 Open Surface Tanks: ☒
 Spray Booths: ☒
 Ventilation Units: ☒
 Controls present (if >6, continue in comments): [25 char max per line]
 Evaluation: [25 char max per line]
 Unit Code: [10 char max]
 Manufacturer's Description: [10 char max]
 NIOSH TC# or foreign equiv. [10 char max]

BEST AVAILABLE COPY

BEST AVAILABLE COPY

Gloves: ☒ acid ☐ cold surfaces ☐ hot surfaces ☐ NBC agents ☐ oil ☐ solvents ☐ surgical gloves ☐ leather/cotton
 Respirator: ☒ abrasive blasting hood ☐ disposable ☐ full face air purifying ☐ 1/2 face air purifying ☐ powered air purifying ☐ 1/4 face air purifying ☐ self-contained ☐ other
 Hearing: ☒ earplugs ☐ ear muffs ☐ other
 Body: ☒ cold weather clothing ☐ coveralls ☐ full body suit ☐ heat reflective vest/suit ☐ safety belt/harness ☐ special purpose clothing ☐ other
 Head and Feet: ☒ cold weather foot/shoe ☐ hard hats ☐ impermeable boots ☐ safety shoes (conductive) ☐ safety shoes (nonconductive) ☐ other ☐ other ☐ other

Eyes and Face: ☒ chemical splash ☐ full face shield ☐ chemical safety impact ☐ safety impact ☐ welding helmet ☐ sunglasses ☐ welding goggles/glasses ☐ laser eye protection
 Head and Feet: ☒ cold weather foot/shoe ☐ hard hats ☐ impermeable boots ☐ safety shoes (conductive) ☐ safety shoes (nonconductive) ☐ other ☐ other ☐ other

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

Reminders: ergonomics - dermalitis - physical agents - flammable storage
 EYE (permanent) - EYE (portable) - SHW - GMY - LEV

evaluator's recommendation
 or agreement

Lead dust

1351 PHARM

[illegible]

☐ Responses/data provided by the faculty is attached to this form.

Healthcare is confronting problems, exacerbated all the more, and needed control items

1. Population described is : ITR

3. other operations. SAT, MAN, LOG
3. lead pipe sample were taken in the water 1000 ft. deep.
The water is colored. This is a sample of water 1000 ft. deep.

010600

0410607 NG

FT. HIB. STEAGULL

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FS FDP

0410607 NG

FT. HIB. STEAGULL

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Supervisor

334 774 010715

FT. HIB. STEAGULL

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Supervisor or Point of Contact

334 774 010715

FT. HIB. STEAGULL

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Lab Hoods

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Vapor Degreasers

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Spray Booths

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Open Surface Tanks

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FT. HIB. STEAGULL

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Ventilation Units

334 774 010715

FT. HIB. STEAGULL

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Controls present (if > 6, continue in comments) [25]

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FT. HIB. STEAGULL

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Unit Code

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Controls Required [25 char max per line]

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Evaluation [25 char max per line]

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Manufacturer's Description [10 char max]

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NIOSH TC# or foreign equiv. [10 char max]

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Head and Feet

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Body

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Hearing

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Eyes and Face

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Gloves

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Requested Record #J-1-0085

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Released by National Guard Bureau

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Page 580 of 759

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FT. HIB. STEAGULL

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MEDDAC FORM 609-R

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FT. HIB. STEAGULL

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Presumptive provided by the facility is attached to this form

Please enter in comments, recommendations and needed simplified forms

2. Other: LOA, MAIL

3. The kitchen is fully functional and is used by dr. 11 personnel and dr. 11 weekend.

Building Number

Root: Under

Sub-MACOM	<input checked="" type="checkbox"/>	RAC	<input checked="" type="checkbox"/>	Unit/Organization	3071
File #	FILE # ST eagull				

Room 1 Y

39	41	45	23150
30	38	46	23150
36	36	47	23150

100

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Frequency	Commercial	Non-Commercial
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99	<input type="checkbox"/>	<input type="checkbox"/>
100	<input type="checkbox"/>	<input type="checkbox"/>

Category	No. CIVs	No. MIL	Contractors	No LOCs
Deaths	1	1	1	1
Wounded	1	1	1	1
Missing	1	1	1	1
Hostages	1	1	1	1
Other	1	1	1	1

Open Surface Tanks	Ventilation Units

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Evaluation [25 char max per line]

Code	Unit	Value
1	1	1
2	2	2
3	3	3
4	4	4
5	5	5
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10	10	10
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93	93	93
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98	98	98
99	99	99
100	100	100

Item Code	Controls Required [25 char max per line]
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[illegible][illegible]

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10 char max]	NIOSH TC# or foreign equiv. [10 char max]
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air purifying	空氣淨化
air purifying	空氣淨化
air purifying	空氣淨化

[illegible][illegible][illegible][illegible]

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canal cap	e^-	R	U	Body
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R U	Head and Feet	e* R U

all employees	cold weather clothing	coveralls
its windows		

[illegible]

	full body suit	
	heat reflective vest/suit	
plugs alone		
plug comb		

impervious boots	
safety shoes (conductive)	

[illegible]

other

10410	04	REC	1998
0121	05	REC	1998
0121	06	REC	1998

Other	
Other	

ica - dermalitis - physical agents - flammable storage
 it) ____ - EYE (portable) ____ - SHW - GMV - LEV

AC0 ADM DSA DSN LAB ICK

HAD ECB EP, RUS SPR WEL

Harold D. ...

-Trifling

Hazard Description
Trifluoromethane

First Name

[illegible]

Remember to comment on problems, recommendations, and needed control items

Operation described is : SHAH

2. Other operations: MAX, MIN, LCA.

3. Weapons are stored in the Vault along with all weapons' equipment containing a radioactive source.

Installation

01C20

Location

GS MAT

Survey Date

04/06/07

Year

04

Month

06

Day

07

MACOM

NG

MACOM

XX

Building Number

FT. H.B. Steagull

Unit/Organization

3971 US 231 So.

RAC

36360-9476

Room Number

Vehicle maintenance

Supervisor

Mr. Ms.

Supervisor or Point of Contact

334 774 8075

Lab Hoods

Vapor Degreasers

Spray Booths

Open Surface Tanks

Ventilation Units

Frequency (hrs/day)

No. CIVs

No. MIL

Contractors

No. LOCs

Controls present (if >6, continue in comments) [25]

LEV

Unit Code

Controls Required [25 char max per line]

Unit Code

NIOSH TC# or foreign equiv. [10 char max]

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Harsh Criticism

29. Antigenic sites
Antigenic sites
Antigenic sites
Antigenic sites

Coltura di *Staphylococcus aureus*

Iasi Maria

M-Day only

Final Phase

三

Summary

Metecore data provided by the facility is all affected to this form

Research in this field is limited, and the results are inconclusive. However, some studies suggest that the use of a structured approach to decision-making can lead to better outcomes. For example, a study by Smith et al. (2018) found that a structured decision-making process led to higher patient satisfaction and better clinical outcomes compared to an unstructured process. Another study by Jones et al. (2019) found that a structured decision-making process led to higher patient satisfaction and better clinical outcomes compared to an unstructured process.

Operation described is: **MAI**

3. Additional operations: MAK, LOA, DHP, BKR, CWG/ADOC

3. There is no local exhaust system present but it is a sub-function of

4. The firm ~~is not~~ ^{is} ~~not~~ present but we need no ~~injection~~

Grand Maltese Islands

5. The battery ~~room~~ room was not functional.

Location **01C** **00** Building Number **01C** **00** Room **01C** **00**
 Date **07** **07** **07** Survey Year **04** Month **06** Day **07** MACOM **07** **07** **07**
 Mr. **07** **07** **07** Ms. **07** **07** **07**
 Supervisor ☒ Mr. **07** **07** **07** Supervisor or Point of Contact **07** **07** **07**
 Lab Hoods ☒ Vapor Degreasers ☒ Spray Booths ☒ Open Surface Tanks ☒
 Controls present (if > 6, continue in comments) **07** **07** **07**

Sub-MACOM **07** **07** **07** RAC **07** **07** **07** Unit/Organization **07** **07** **07**
 Frequency (hrs/day) **07** **07** **07** No. CIVs **07** **07** **07** No. MIL **07** **07** **07** Contractors ☒ No LOCs ☒
 Unit Code **07** **07** **07** Controls Required (25 char max per line) **07** **07** **07**

Manufacturer's Description [10 char max] **07** **07** **07** NIOSH TC# or foreign equiv. [10 char max] **07** **07** **07**
 Evaluation [25 char max per line] **07** **07** **07**

Gloves **07** **07** **07** Respirator **07** **07** **07** Body **07** **07** **07** Head and Feet **07** **07** **07**
 Eyes and Face **07** **07** **07** Hearing **07** **07** **07**

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 2. *Methodology*
 3. *Results*
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 5. *Conclusion*
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 97. *Tables*
 98. *Figures*
 99. *Tables*
 100. *Figures*

Category

[illegible]

Operation described by: OTH

2. Other operations: L&A, M&A
3. Vehicles are driven onto the Sloom Weapons are also cleaned on the drill floor.
4. Head wife. Attempts were taken on the drill floor, and the head the Alameda.

5. The drill hall is also used as a dining facility.

APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2600
31 January 1994

NO PAM (AR) 385-16/
ANGPAM 81-101

Safety

**GUIDELINES FOR CONVERTING
INDOOR FIRING RANGES TO OTHER USES**

Summary. This is a new pamphlet. The guidance prescribes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. This guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulation/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVN-SI).

Impact on New Warning System. This guidance does not contain information that affects the New Warning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested Improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau Attn: NGB-AVN-SI, 111 South George Mason Drive, Arlington, VA 22204-1382.

Distribution. Distribution of this publication is made in accordance with the requirements on DA Form 12-DS-E.

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- A. Sampling Strategy for Collection of Wipe Samples
- B. Interpretation of Sample Results (Prior to Cleaning)
- C. Interpretation of Sample Results (After Cleaning)
- D. OSHA Instruction CPL 3-2.208
- E. Where to Purchase Sample Media and Containers
- F. AEHA Form 3-R (Bulk Sample Data)
- G. Instructions to Complete AEHA Form 3-R
- H. Examples of Computation of Lead Level from Wipe Sample Results
- I. Supporting Laboratories and Areas Served

Glossary

1. Purpose

This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.

2. References

Related publications are listed below.

a. DOD 6055.1 (Department of Defense Occupational Safety and Health (OSH) Program).

b. AR 71-34 (The Army Respiratory Protection Program).

c. AR 40-3 (Preventive Medicine).

d. NGR (AR) 385-15 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).

e. 19 MED 602 (Occupational and Environmental Health Respiratory Protection Program).

f. USAEHA TO 141 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).

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

21 January 1984

NG Part (AR) 385-1 & ANGPAM 91-101

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

B-1 200 micrograms/sq ft or LESS

If all sample results are 200 micrograms/sq ft or less, the range can be converted and/or used for any purpose.

B-2 BETWEEN 201 and 200,000 micrograms/sq ft

Range must be subdivided. Continue with cleaning instructions listed in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

B-3 OVER 200,000 micrograms/sq ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/sq ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/sq ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/sq ft limit.

B-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substratum. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

APPENDIX D INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

D-1 200 micrograms/sq ft or LESS

If all sample results are less than 200 micrograms/sq ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substratum.

D-2 ABOVE 200 micrograms/sq ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/sq ft level. If all sample results meet this criteria, a contrasting color of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of kitchen equipment and food is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE, that if your original range sample results were, i.e., 175,000 ug/sq ft then you would have to reduce the lead level below 13,125 ug/sq ft. This would meet the 75 percent reduction criteria. However, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will allow the latex paint to adhere to the substratum. If the paint peels, falls to the floor and is crushed over a period of time, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the converted range for signs of peeling paint. Paint chips can be analyzed for lead content. **DO NOT IGNORE PEELING PAINT IN A CONVERTED INDOOR FILING RANGE.**

APPENDIX E

Analytical Environmental Services, Inc.

Date: 7/26/06

TOTAL LEAD IN WIPE SAMPLES
N7081

CLIENT: National Guard Bureau Region-South IH
 Project: Lead Analysis
 Delivery Order:
 PO No.

Lab Order: 0407411
 Date Received: 7/12/2004 to 25
 Matrix: Wipe

Laboratory ID	Client Sample ID	Residue	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0407411-052A	QZ-01-01	270	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-053A	QZ-02-02	712	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-054A	QZ-03-03	693	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-055A	QZ-04-04	841	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-056A	QZ-05-05	881	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-057A	QZ-06-06	200	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-058A	QZ-07-07	881	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-059A	QZ-08-08	100	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-060A	QZ-09-09	881	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-061A	QZ-10-10	881	µg/ft²	200	1	6/30/2004	7/14/2004	EM
0407411-062A	QZ-11-11	881	µg/ft²	200	1	6/30/2004	7/14/2004	EM

Quantity: ND - Not Detected at the Reporting Limit

DF - Dilution Factor

Quantity: ND - Not Detected at the Reporting Limit

DF - Dilution Factor

Analytical Environmental Services, Inc.

Date: 25-July-06

CLIENT:	National Guard Bureau Region South IH	Client Sample ID:	Qark OZ-12
Lab Order:	0407411	Tag Number:	
Project:	Lead Analysis	Collection Date:	6/30/2004
Lab ID:	0407411-036A	Matrix:	SOIL

Analysis	Result	Limit	Qual	Units	Batch ID	DF	Date Analyzed
METALS TOTAL		SW6010B		(SW3030B)			Analysis COPY
Lead	215	575		mg/kg	47611	1	7/13/2004 7:15:00 PM

Qualifiers:	<ul style="list-style-type: none"> * Value exceeds Maximum Contaminant Level BRL Below Reporting Limit M Holding time for preparation of analysis exceeded N Analyte not NELAC certified Rpt Limit Reporting Limit 	<ul style="list-style-type: none"> D Analyte detected in the unspiked Method Blank E Value above quality control range A Analyte detected below detection limit F NELAC analyte interference pending S Spike Recovery outside accepted recovery limits
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Analytical Environmental Services, Inc.

Date: 8/25/2004

CLIENT: National Guard Bureau Region-South US
Lab Order: 0407411
Project: Lead Analysis
Lab ID: 0407411-097A

Client Sample ID: Ozark OZ-13
Tag Number:
Collection Date: 6/30/2004
Matrix: SOIL

Analyses	Result	Limit	Qual	Units	Batch ID	DF	Date Analyzed
METALS, TOTAL		SW9010B	[SW9010B]				Analyst: GDW
Lead	134	4.51		mg/kg	47611		7/13/2004 7:18:06 PM

Qualifiers:	+	Value exceeds Maximum Contaminant Level	3	Analyte detected in the sample at Method Blank
	BR	Below Reporting Limit	4	Value above quantitation range
	H	Blanking times for preparation or analysis exceeded	5	Analyte detected before quantitation range
	N	Analyte not NELAC certified	6	NELAC analyte certification pending
	Rpt Limit	Reporting Limit	7	Spikes Recovery outside accepted recovery range

APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Henry B. Steagull National Guard Armory, Ozark, Alabama.

Ft. Henry B. Steagull
Personnel List

1. CPT **Non-Responsive**
2. SGM **Non-Responsive**
3. SLT **Non-Responsive**
4. SFC **Non-Responsive**
5. SSG **Non-Responsive**
6. SGT **Non-Responsive**
7. SFC **Non-Responsive**

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

NGB-AVN-SI

28 May 2003

MEMORANDUM FOR State Safety Office, AL, ATTN: MAJ **Non-Responsive**
Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711

SUBJECT: Industrial Hygiene Lead swipe sampling at the Prattville National Guard Armory, Prattville, Alabama.

1. References.

- a. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- b. AR 40-5, Preventive Medicine, October 1990.
- c. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- d. AR 385-10, 23 May 1988, Army Safety Program.
- e. TB MED 530, The Army Industrial Hygiene Program.
- f. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- g. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- h. NG PAM 385-15, "Policy, Responsibilities and Guidelines for Housekeeping and/or Conversion of Indoor Firing Ranges".
- i. NG PAM (AR) 385-16, "Guidelines for Converting Indoor Firing Ranges to Other Uses".

2. General.

- a. At the request of the Alabama State Safety and Occupational Health Office, Lead swipe sampling was conducted at the Prattville National Guard Armory in Prattville, Alabama.
- b. Ms **Non-Responsive** of the Southeastern Regional Industrial Hygiene office conducted the survey and the sampling.

3. Findings: The Sampling results revealed the following.

Prattville Armory
Wipe Samples Indoor Firing Range Collected 29 Apr 03

<u>Sample #</u>	<u>Location</u>	<u>Results</u>
1	Back Stop Left Wall	1740
2	Back Stop Middle Wall	21600
3	Back Stop Top right Wall	49200
4	Right of Table	315
5	Desk upside down	64.0
6.	Toy Basketball net	BRL
7.	Green File Cabinet	131
8.	Green Broad	BRL
9.	Desk in Sand	22.0
10	Floor	1600
11	Tent on floor	134
12	Floor	2110
13	Gray Locker	BRL
14	Stand	65.0
15	Sand	1650

The Indoor Firing Range and most of the items inside appear to be contaminated with lead.

4. Recommendations.

- a. Do not remove anything from the Indoor Firing Range before all stored item are cleaned and decontaminated.
- b. Remove Backstop, Sand and Ventilation system from Indoor Firing Range if area is to be used for something other than an Indoor Firing Range.
- c. Clean and decontaminate walls, floor, ceiling and light fixtures.
- d. Follow: references 1.h and 1.i. to proper decontaminate and clean the Indoor Firing Range.

5. If additional information is needed about the contractors report, please contact [REDACTED]

Non-Responsive Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR
 COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist



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

NGB-ARS-SEIH

9 November 2006

MEMORANDUM THRU COL [Non-Responsive] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: MAJ. [Non-Responsive] Administrative Officer, 3443 U.S. Highway 80 west, Selma, Alabama 36701.

SUBJECT: Industrial Hygiene Special of the Selma Armory.

1. References.

- a. Report completed 16 October 2006, Industrial Hygiene report for Selma Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

5. If additional information is needed about the report, please contact **Non-Responsive**
Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ **Non-Responsive** Alabama State Safety and
Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC **Non-Responsive** Alabama State Safety and
Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

a. At the request of LTC [REDACTED] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Selma Armory.

b. [REDACTED] of Minckler & Associates conducted the industrial hygiene Survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. MSDS (material safety data sheets) need to be on hand for each chemical used in facility. Conduct semi-annual inventories on all chemicals in the facility. (RAC 3)

b. **Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines for converting indoor firing ranges to other uses and NG REG 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges. (RAC 1)**

c. Due to the lead dust wipe results, it is recommended that the inactive indoor firing range be thoroughly cleaned from top to bottom to include the floor, the tent covers, the tool boxes, the bottom wooden shelves, the stamped machine, the arms room floor, the steam cleaner, the tents, and the light fixtures/covers. Also, the arms room floor, electronics area shelves, the floor sweeper in mechanics room, and the motor pool office shelves must 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 attachment 5. (RAC 1)

d. Replace the ceiling tile in the classroom, storage room 185, room 156, and room 129 to eliminate the mold and dust. See attachment 6 for additional cleaning measures. (RAC 3)

e. Submit a work order to facilities maintenance office to check the roof leaks. (RAC 3)

f. Repair, replace, and/or fix the lighting and area deficiencies in paragraph 4 of the report. (RAC 2)

g. Fire extinguishers must have gauges and inspection tags. Continue to 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. **Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.**

i. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

Industrial Hygiene Report
For
Alabama Army National Guard
Selma Armory
3443 U.S. Highway 80 West
Selma, Alabama 36701



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

October 7, 2006

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October 16, 2006

MEMORANDUM FOR: Alabama Army National Guard, Attn: Major [REDACTED] Administrative Officer,
3443 U.S. Highway 80 West, Selma, Alabama 36701

SUBJECT: Industrial Hygiene Consultation and Health Hazard Information Module (HHIM) Survey,
Selma Army National Guard, Selma, Alabama

1. **BACKGROUND:** At the request of Mr. [REDACTED] National Guard Bureau Regional Industrial Hygienist, Atlanta, Georgia, an Industrial Hygiene Consultation and Health Hazard Information Module Field Survey were performed at the Selma Army National Guard Armory, Selma, Alabama on September 25th and 26th. The POC was SSG [REDACTED] at 334-874-3269. 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 attachment 1 for completed HHIM Survey Form).
2. **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 01/15/06
 - b) Ghost Wipe Lead Dust Wipes, Manufactured:12/05, Expiration: 06/09

3.

Findings:

- a) Headquarters 122nd Corps Support Group:
 - i) The armory was built in 1996. Sixty M-Day soldiers were assigned to the unit. The support group had two battalions and about 10 subordinate units under each battalion. Their mission was to support the battalions and subordinate units in carrying out missions to accomplish a goal. The permanent party staff provided readiness and personnel support in the areas of pay, assignments, training, promotions, and schools.
 - ii) The Material Safety Data Sheets (MSDS) were not available on the cleaning supplies used in the facility. Only, 5-6 cleaning items were used in the facility (See attachment 2). All employees must be initially trained in the Federal Hazardous Communication Program IAW 1910.1200.
 - iii) All fire extinguishers were outdated and needed serviced. Also, the Auxiliary External Defibrillator (AED) had an expired power pack: July 2005.

- iv) Twenty-one lead dust wipe samples were taken, using a 10 inch by 10 inch template. Eleven samples were above the federal standard of $40\mu\text{g}/\text{ft}^2$. Nine samples were above the Army National Guard standard of $200\mu\text{g}/\text{ft}^2$. Pictures of the lead sample wipes were taken (See attachment 8, photo's 3 to 23). The analytical lead result sheet included the sampled locations and corrected results. Also, the sample submission sheets were included in the report (See attachment 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:
Northwest Floor, Old IFR	M08606	20000 $\mu\text{g}/\text{ft}^2$
Middle of Floor, Old IFR	M08706	11000 $\mu\text{g}/\text{ft}^2$
Backstop Surface, Old IFR	M08806	17000 $\mu\text{g}/\text{ft}^2$
Tray Holder Firing Line, Old IFR	M08906	8800 $\mu\text{g}/\text{ft}^2$
Plenum Floor, Old IFR	M09006	2600 $\mu\text{g}/\text{ft}^2$
Arms Room Floor	M09106	290 $\mu\text{g}/\text{ft}^2$
Supply Room Counter Shelf	M09206	26 $\mu\text{g}/\text{ft}^2$
Supply Room Floor, Under Shelf	M09306	26 $\mu\text{g}/\text{ft}^2$
Ice Machine Surface-Kitchen	M09406	11 $\mu\text{g}/\text{ft}^2$
Floor Sweeper Surface, Utility Room	M09506	160 $\mu\text{g}/\text{ft}^2$
Under Folding Table, Utility Room	M09606	42 $\mu\text{g}/\text{ft}^2$
Shelf Under AC Unit, 2 nd Supply Rm. 185	M09706	320 $\mu\text{g}/\text{ft}^2$
Shelf, 2 nd Storage Rm. 185	M09806	230 $\mu\text{g}/\text{ft}^2$
Maintenance Room Shelf	M09906	14 $\mu\text{g}/\text{ft}^2$
Weight Room Floor	M10006	14 $\mu\text{g}/\text{ft}^2$
Under Candy Machine, Drill Hall	M10106	9.9 $\mu\text{g}/\text{ft}^2$
Northeast Drill Hall Floor	M10206	300 $\mu\text{g}/\text{ft}^2$
2 nd Supply Area, Under Folding Chair	M10306	17 $\mu\text{g}/\text{ft}^2$
Men's Locker Room Floor	M10406	23 $\mu\text{g}/\text{ft}^2$
S-1, Room 129, Shelf	M10506	7.1 $\mu\text{g}/\text{ft}^2$
Drill Hall Garage Door Surface	M10606	25 $\mu\text{g}/\text{ft}^2$

Note 1: IFR refers to Indoor Firing Range

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

- v) Mold and a lead paint sample were taken from the large classroom. The analytical lead result sheet included the sampled locations and corrected results. Also, the sample submission sheets were included in the report (See attachment 3). The following table notes the area, the material sampled, the field number, the results, and the standards:

Area	Material Sampled	Field Number	Results	Standards
Large Classroom	Mold from Ceiling Tile	M20606	None Detected	Mold was identified on Bulk Sample
Large Classroom	Paint Chips from Wall	M20506	<0.0025 % by weight	600 mg/Kg (ppm) or 0.06% by weight by HUD Sds

- vi) Drill Hall (Photo 1): Conducting drill and ceremonies in the large hall was its main purpose. Illumination levels ranged from 10-21 FC's.
- vii) 2nd Supply Storage, Rm. 185 (Photo 2): Crack in wall; ceiling tiles water stained.
- viii) An old indoor firing range was empty. It had not been used as firing range in about 10 years.
- ix) Area fire extinguishers were out dated.
- x) Due to the low noise levels (administrative areas) there was no requirement for a Hearing Conservation Program. M-Day and permanent party soldiers had earplugs and earmuffs.
- xi) A listing of Selma Armory personnel was shown in attachment 2.
- xii) A design drawing of the building and illumination levels were attached as attachment 4.

4. ILLUMINATION SURVEY RESULTS/AREA DEFICIENCIES:

- a) Illumination Levels: The following deficiencies and illumination level readings were noted during the survey and were reported below:

LOCATION	Number of Fixtures/ Lights per Fixture	Number of Burned Out Bulbs, Tubes, Lamps & Other Deficiencies	Illumination Foot Candles (FC)
Drill Hall	28 Fixtures, 1 each	1 lamp out; 1 light cover open; lights turned on intermittently	10-21
Rifle Range	4 Fixtures, 4 each 20 Fixtures, 1 each	1 light cover warped 3 bulbs out	6-42
Plenum Area-Range	3 Fixtures, 2 each		44-52
Supply Room 122	11 Fixtures, 4 each		12-45
Vault No.2	3 Fixtures, 2 each & 2 Task Lights	1 tube out	15-41
Office, Room 187	2 Fixtures, 2 each & 2 Fixtures, 1 each		41-97
Vault No.3		Locked	
Supply Rm.1135	10 Fixtures, 4 each	25 tubes out	1-24
Room 1135 Office	2 Fixtures, 2 each	2 tubes out	10-77
Kitchen	8 Fixtures, 2 each	7 tubes out	5-140
Cleaning Room	2 Fixtures, 2 each	2 tubes out	11-21
Maintenance Rm.	4 Fixtures, 2 each	3 tubes out	14-69
Supply Rm.185	12 Fixtures, 4 each	10 tubes out/crack in wall	15-35
Weight Rm.178	4 Fixtures, 4 each	2 tubes out/ceiling tile stained & 1 cracked	20-76
Room 177	1 Fixture, 4 each	2 tubes out	22-49
Room 175	2 Fixtures, 4 each		56-87
Classroom Rm.176	24 Fixtures, 4 each	6 tubes out; 6 ceiling tiles missing; 7 ceiling tiles stained; switches broken for spot lamps	36-118
Library, Rm.173	4 Fixtures, 4 each	2 tubes out, 1 ceiling tile out	29-61
Room 174	4 Fixtures, 4 each		130-141
Room 175	4 Fixtures, 4 each		56-87
Room 151	2 Fixtures, 4 each		56-93
Room 150	2 Fixtures, 4 each	Ceiling tile missing	43-60
Room 152	6 Fixtures, 4 each	Bugs in light covers	85-134
Room 153	2 Fixtures, 4 each		85-94
Room 157	2 Fixtures, 4 each		90-98
Room 158	2 Fixtures, 4 each		55-62
Room 159	2 Fixtures, 3 each		104-121

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.

LOCATION	Number of Fixtures/ Lights per Fixture	Number of Burned Out Bulbs, Tubes, Lamps & Other Deficiencies	Illumination Foot Candles (FC)
Room 154	4 Fixtures, 4 each		71-102
Room 149	2 Fixtures, 4 each	2 tubes out	38-51
Room 148	2 Fixtures, 4 each	4 tubes out	60-64
Room 147	2 Fixtures, 4 each		100-105
Room 146	2 Fixtures, 4 each		61-60
Room 145	2 Fixtures, 4 each		92-100
Room 144		Locked	
Room 143		Locked	
Room 142	6 Fixtures, 3 each	2 tubes out	33-65
Room 134	2 Fixtures, 4 each		40-50
Room 138	1 Fixture, 1 each		22-24
Room 140	2 Fixtures, 4 each		64-94
Room 141	2 Fixtures, 4 each	2 tubes out	61-72
Room 139	3 Fixtures, 3 each	2 tubes out; Ceiling tile frame damaged	66-77
Room 135	2 Fixtures, 4 each		31-42
Room 133	2 Fixtures, 4 each		60-63
Room 132	4 Fixtures, 3 each		47-56
Copy Room 131A	2 Fixtures, 2 each		31-70
Room 130	2 Fixtures, 3 each		57-60
S-1, Room 129	4 Fixtures, 3 each	3 tubes out; 4 stained ceiling tile missing ceiling tile	30-48
Room 128	2 Fixtures, 3 each		56-72
Room 127	2 Fixtures, 3 each		80-82
Room 126	4 Fixtures, 3 each	4 tubes out	32-46
Room 121	4 Fixtures, 3 each		71-74
Room 122		Locked	
Room 123	4 Fixtures, 3 each		54-84
Room 120	4 Fixtures, 3 each	1 tube out	62-109
Room 124	2 Fixtures, 2 each		54-59
Room 118	2 Fixtures, 3 each	2 tubes out	43-60
Room 119	2 Fixtures, 3 each	4 tubes out	39-58
Room 117	4 Fixtures, 3 each	12 tubes out	3-26
Room 116	2 Fixtures, 3 each	1 tube out	38-57
Room 115	2 Fixtures, 3 each		47-61
Room 114	4 Fixtures, 3 each	4 tubes out	26-54
Room 113	2 Fixtures, 3 each		41-65
Room 112	2 Fixtures, 3 each		78-80

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.

LOCATION	Number of Fixtures/ Lights per Fixture	Number of Burned Out Bulbs, Tubes, Lamps & Other Deficiencies	Illumination Foot Candles (FC)
Room 105	4 Fixtures, 4 each		91-113
Room 106	2 Fixtures, 2 each		100-102
Room 107	2 Fixtures, 3 each		98-100
Room 102	6 Fixtures, 4 each	1 ceiling tile missing	65-109
Room 101	6 Fixtures, 4 each	4 tubes out; 2 ceiling tile out	63-101
Room 103	6 Fixtures, 4 each	2 tubes out	47-103
Room 111	4 Fixtures, 4 each		76-121
Room 108	2 Fixtures, 3 each		80-83
Room 109	2 Fixtures, 3 each		60-61
Room 110	2 Fixtures, 3 each		80-84
Restroom 172	1 Fixture, 1 each	Vent worked	8-9
Men's Latrine Room 165A	5 Fixtures, 1 each	2 tubes out	21-38
Men's Shower Room 165A	1 Fixture, 2 each; 1 Fixture, 4 each	2 tubes out; 3 exhaust vents out	44-52
Men's Locker Room 165A	10 Fixtures, 4 each	27 tubes out; 7 light covers missing	.3-22
Women's Latrine Room 168	7 Fixtures, 2 each		31-43
Women's Shower Room 168	2 Fixtures, 2 each	1 tube out; exhaust vent out	5-30
Room 160	2 Fixtures, 3 each	2 tubes out	29-74
Room 161	6 Fixtures, 4 each	13 tubes out	11-112
Room 156	6 Fixtures, 4 each	2 ceiling tiles stained	56-102

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.

5. TECHNICAL ASSISTANCE:

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

Non-Responsive

Industrial Hygiene Technician

CF:

Office of the Adjutant General
ATTN: SAOH (Major **Non-Responsive**)
P.O. Box 3711
Montgomery, Alabama 36109-0711

HEALTH HAZARD INFORMATION MODULE FIELD SURVEY

Attachment 1
SEE PRIVACY ACT STATEMENT ON REVERSE
(For use of this form, see EPCRA User's Instructions)

SECTION 1.

DEMOGRAPHIC DATA

a. ARLC 01000 b. INSTALLATION AL NAT GUARD c. BLDG/ROOM NUMBER SELMA ARMORY
d. LOCATION CODE AD e. OPERATION CODE ADD f. SAH g. DESCRIPTION HEADQUARTERS
122ND CORPS SUPPORT GROUP SUPPORTED 2 BATTALIONS IN REFERENCE TO TRAINING
ADMINISTRATIVE DUTIES, SCHOOLS AND PROMOTIONS.
h. UNCOM CODE NG i. SUBUNCOM CODE XX-1 j. SUPERVISOR MAJ
k. TELEPHONE/AUTOVON NUMBER (334) 874-3269 l. FAC 3 m. FREQUENCY (Per Fed Dist) 8 HRS/DY
n. NO CIVCS o. NO MIL 9 p. NO CONTRACTORS q. NO LOCs r. NO OTHER

SECTION 2.

UTILITARIAN DATA

a. LAB HOODS 0 b. VAPOR DECREASERS 0 c. MAINTENANCE DAYS 0 d. SHAY BOOTS 0
e. OPEN SURFACE TANKS 0 f. VENTILATION UNITS 0

SECTION 3.

SURVEY DATA

a. SURVEY DATE Sept 25, 2006

b. EVALUATOR INITIALS

c. CONTROLS PRESENT	d. EVALUATION	e. UNIT CODE	f. CONTROLS REQUIRED	g. STATUS
OTH (DRILL HALL)	10-20 FPC inadequate	ETC	50 FPC (20-50 nominal range)	RECD
OTH (SUPPLY RM)	13-85 FPC inadequate	ETC	50 FPC (20-50 nominal range)	RECD
OTH (KITCHEN)	5-85 FPC inadequate	ETC	50 FPC (20-50 nominal range)	RECD

a. PERSONAL PROTECTIVE EQUIPMENT (K=REQUIRED; A=AVAILABLE)

MANUFACTURER

PROS/TC NO

R/A

1. RESPIRATOR

DISPOSABLE

FACE AIR PURIFYING

FACE AIR PURIFYING

FULL FACE AIR PURIFYING

POWERED AIR PURIFYING

AIRLINE

SELF-CONTAINED

ABRASIVE BLASTING HOOD

1. GLOVES	R/A	2. EYES/FACE	R/A	3. HEARING	R/A	4. BODY	R/A	5. HEAD/FOOT	R/A
ACID	/	CHEMICAL/SPASH	/	MUFFS	/	APRONS	/	HARD HATE	/
OIL	/	SAFETY/IMPACT	/	EARMUFFS	/	COVERALLS	/	IMPERMEABLE BOOTS	/
SOLVENTS	/	CHEMICAL SAFETY	/	CANAL CAPS	/	FULL BODY SUIT	/	SAFETY CONDUCT SHOES	/
HOT SURFACES	/	FULL FACE SHIELD	/	HELMETS	/	SAFETY BELT/HARNES	/	SAFETY/ANTI-CORROSION	/
COLD SURFACES	/	WELDING HELMET	/		/	HEAT RESIST VEST/SUIT	/	TYPE SHOES	/
NBC AGENTS	/		/		/	BDUs	/		/

SECTION 4.

HAZARD INVENTORY DATA

a. CAS CODE	b. HAZARD DESCRIPTION	c. PAC/ETC	d. MEDICAL SURVEILLANCE RECOMMENDED (YES/NO)
7439-92-1	LEAD, INORGANIC DUSTS, AS PB	2B	NO

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (AL)
Released by National Criminal Bureau

SECTION 5 PERSONNEL

1. LAST NAME	2. SEX	3. ISO	4. POSITION	5. CATEGORY
Non-Responsive	F		S-1 NCO	AGR
	M		TRAINING NCO	AGR
	F		Admin NCO	AGR
	F		SUPPLY SGT	AGR
	M		S2-3 PLANS NCO	AGR
	M		School MANAGER	AGR
	F		PLANS OFFICER	AGR
	M		S-4 NCO	AGR
	M		S-4 OFFICER	AGR

SECTION 6

COMMENTS and blank sheet of paper if necessary

- ALL FACILITY DEFICIENCIES WERE NOTED IN REPORT UNDER ILLUMINATION LEVELS AND DEFICIENCIES (AREA).
- NO MSDS'S ON CLEANING SUPPLIES, EVEN THOUGH FEW QUANTITIES WERE ON HAND.
- 21 LEAD WIPE SAMPLES WERE TAKEN; 1 MOLD AND 1 LEAD PAINT SAMPLE WAS TAKEN.
- EXHAUST FAN RATTLES IN MAIN SUPPLY ROOM.
↳ NOISY
- SUPPLY HANDLED CLASS 2 ITEMS SUCH AS ORGANIZATION CLOTHING & EQUIPMENT.

PRIVACY ACT ATTACHMENT

Under U.S. Code, Section 301; Executive Order 13526 with the intent of this information is to identify and monitor data relating each DA civilian employee exposed to a hazardous substance or to provide a record of exposure for any given worker.

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

Released by National Guard Bureau

Page 611 of 759

ALABAMA ARMY NATIONAL GUARD
HEADQUARTERS 122D CORPS SUPPORT GROUP
3443 US HWY 80WEST
SELMA, AL 36701

1. The following names below are the full-time employees that work at the unit:

Last, First Name	Rank	Duty
1. Non-Responsive	MAJ	Administration Officer
2.	MSG	S-1 NCO
3.	SGT	Training NCO
4.	SPC	Admin NCO
5.	SSG	Supply Sergeant
6.	SGM	S2-3 Plans NCO
7.	SFC	School Manager
8.	MAJ	Plans Officer
9.	MSG	S-4 NCO
10.	MAJ	S-4 Officer

2. This unit is a support unit that has 2 Battalions and about 10 subordinate units under each Battalion. Our battalions are located in Eufaula and Ashland, and their subordinate units are scattered from Wetumpka, Troy, Camden, Clayton, and etc. Our mission is to support our battalions and subordinate units in carrying out missions to accomplish a goal. If there is a need for one of the subordinate to have trucks delivered to them, it is the 122nd job to task one of the other subordinate units to complete the mission.

3. This unit has about 60 M-Day personnel that attend drill once a month.

4. Below is a list of chemicals that are stored within the Armory:

- Clorox
- Pine Oil
- Windex
- All Purpose Cleaner
- Simple Green



**DATA
CHEM**
LABORATORIES, INC.

TEST REPORT
Page 1 of 3
10/11/06

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

Reference Data:	Lead
Client Sample No.:	M08606 through M10706
P.O. No.:	Not Available
Sample Location:	Selma Army, Selma, AL
Sample Type:	Ghost Wipe
Method Reference:	3050B/6010B
DCL Set ID No.:	06-S-5318
DCL Sample ID No.:	06-37208 through 06-37230
Sample Receipt Date:	10/2/2006
Preparation Date:	10/4/2006
Analysis Date:	10/10/2006

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 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
4365 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3708
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
M08606	06-37208	0.69	14000.	20000.
M08706	06-37209	0.69	7900.	11000.
M08806	06-37210	0.69	12000.	17000.
M08906	06-37211	0.69	6100.	8800.
M09006	06-37212	0.69	1800.	2600.
M09106	06-37213	0.69	200.	290.
M09206	06-37214	0.69	18.	26.
M09306	06-37215	0.69	18.	26.
M09406	06-37216	0.69	7.3	11.
M09506	06-37217	0.69	110.	160.
M09606	06-37218	0.69	29.	42.
*M09806	06-37219	0.69	220.	320.
*M09806	06-37220	0.69	160.	230.
M09906	06-37221	0.69	9.7	14.
M10006	06-37222	0.69	10.	14.
M10106	06-37223	0.69	6.8	9.9
M10206	06-37224	0.69	210.	300.
M10306	06-37225	0.69	12.	17.
M10406	06-37226	0.69	16.	23.
M10506	06-37227	0.69	4.9	7.1
	Prep Blank		ND	
% Recovery	LCS 1		96.	
% Recovery	LCS 2		92.	
RPL			2.0	

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

LCS = laboratory control sample.

*Both samples labeled as M09806.

Non-Responsive

Analyst

Non-Responsive

Reviewer

Results
Lead

Client #	DCL #	Total Area (ft ²)	µg/Wipe	µg/ft ²
M10606	06-37228	0.69	17.	25.
M10706	06-37299	0.69	ND	<2.9
	Prep Blank		ND	
% Recovery	LCS 3		95.	
% Recovery	LCS 4		95.	
RPL			2.0	

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

LCS = laboratory control sample.

Non-Responsive

Analyst

Non-Responsive

Reviewed



TEST REPORT
Page 1 of 2
10/10/06

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

Reference Data:	Lead
Client Sample No.:	M20506
P.O. No.:	Not Available
Sample Location:	Selma Armory, Selma, AL
Sample Type:	Paint
Method Reference:	3050B/6010B
DCL Set ID No.:	06-S-5318
DCL Sample ID No.:	06-37230
Sample Receipt Date:	10/2/2006
Preparation Date:	10/5/2006
Analysis Date:	10/9/2006

The sample was prepared in accordance with EPA method 3050B. Sample condition was acceptable upon receipt except where noted. The sample was then analyzed in accordance with EPA method 6010B using a trace ICP.

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
4368 GLENDALE-MILFORD ROAD
CINCINNATI, OHIO 45242-3706
513 733-6336, FAX 513 733-6347

Non-Responsive

Reviewer

WEST COAST OFFICE
11 SANTA YRMA COURT
NOVATO, CALIFORNIA 94945
800 260-8071, FAX 415 893-9465

TEST REPORT
Page 2 of 2
06-S-5318

Results
Lead

Client #	DCL #	mg/Kg (ppm)	% by weight
M20506	06-37230	ND	<0.0025
	Prep Blank	ND	
% Recovery	LCS	92.	
% Recovery	06-37230MS	93.	
% Recovery	06-37230MSD	95.	
RPL		25.	0.0025

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

LCS = laboratory control sample.

MS/MSD = matrix spike/matrix spike duplicate.

Non-Responsive

Analyst

Non-Responsive

Reviewer



Test Report
Page 1 of 2
10/6/06

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

Reference Data:	Mold
Sample Location:	Selma Armory, Selma; 1165 th MP Co., Thomasville Armory, Thomasville & Co. B. 711 th Signal Bn, Grove Hill Armory
Sample Type:	Bulk
Client Sample No.:	M20606 through M17806
PO #:	Not Available
Method Reference:	DCL SOP Method MC-AN-005
Sample Set ID#:	06-W-5269
DATAChem Lab No.:	06-36853 through 06-36856
DATAChem Sample Receipt Date:	10/2/06
Analysis Date:	10/5/06

DCL SOP Method MC-AN-005 is used to identify fungal spore types at the genus level and to quantify spore concentrations. This procedure does not provide an exact spore count. It does provide a visual estimation of identifiable contamination and individual spore concentrations within a visual field using plain light microscopy under 630x magnification. Individual spherical spores lacking any distinguishing characteristics may be grouped and classified under the category "Amerospores." Total fungal spore particulate concentrations include both viable and non-viable estimates.

Sample condition was acceptable upon receipt except where noted.

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

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

These analyses were conducted at DataChem Laboratories, Salt Lake City, UT.

Non-Responsive

CINCINNATI OFFICE
4388 GLENDALE-MILFORD ROAD
CINCINNATI, OH 45242-3705
513 733-6336, FAX 513 733-6347

QA/QC Manager
DataChem Laboratories, Inc.
Cincinnati, OH

WEST COAST OFFICE
11 SANTA YORBA COURT
NOVATO, CALIFORNIA 94945
909 280-8071, FAX 415 890-9469

Test Report
Page 2 of 2
06-W-5269

Data Table

Client #	M20606	M15106	M17706	M17806
DCL #	06-36853	06-36854	06-36855	06-36856

Summary Results

Percentage

Mycelial Fragments	ND	ND	5-25%	ND
--------------------	----	----	-------	----

Spore Percentage

Alternaria	ND	1-5%	ND	ND
Cladosporium	ND	ND	ND	1-5%
Pithomyces/Ulocladium	ND	ND	25-75%	ND
Total Spore Percentage	ND	1-5%	25-75%	1-5%

Sample Preparation: Sample is mounted on a supportive glass slide that is then prepared for viewing by the use of appropriate microbiological stains.

Sample Calculation: Visual estimation of spore concentrations are based on background interference contamination and individual spore concentrations within a visual field. A total spore percentage versus the background interference concentration is presented in the data table. Individual percentages of various spore types are also provided, representing as a whole the total conidia percentage.

DataChem Laboratories, Salt Lake City Division, is AIHA accredited for specified Fields of Testing as documented by the scope of accreditation. The Mycology Laboratory Manager and analysts hold at least a B.S. degree in Microbiology or equivalent discipline, and are well qualified and experienced with microbial identification.

Spore Rating	Spore Percentage	Interpretation of Results
0	0%	No spore contamination present.
1	1-5%	Not a significant presence of spores on surface or within the sample matrix.
2	5-25%	LOW presence of spore contamination on surface or within the sample matrix.
3	25-75%	MODERATE presence of spore contamination on surface or within the sample matrix.
4	75-100%	HIGH presence of spore contamination on surface or within the sample matrix.

**DATA
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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 9-25-06 Purchase Order No. N/ACompany Name MINCKLER & AssociatesAddress 1503 ZALGER DRIVE
Colorado Springs, CO 80915Person to Contact Non-ResponsiveTelephone (719) 510-9517Fax Telephone (509) 757-4846

Billing Address (if different from above)

MR KEN FULLER, NATIONAL GUARD BUREAU
College Park, GeorgiaQuote No. N/A

Sample Collection

Sampling Site Selma Army, Selma, ALIndustrial Process AdministrationDate of Collection 9-25-06Time Collected 1230-1600Date of Shipment 9-30-06QC Requirements ☒ Standard ☐ OtherCollector's Name Non-ResponsiveSignature Non-Responsive

REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Media Type*	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
37208	M08606	Lead wipe	10"x10"	LEAD- NORTHWEST FIRING RANGE. FLOOR
37209	M08706	"	"	LEAD- MIDDLE FIRING RANGE FLOOR.
37210	M08806	"	"	LEAD- BACKSTOP- FIRING RANGE
37211	M08906	"	"	LEAD- TRAY HOLDER- FIRING LINE
37212	M09006	"	"	LEAD- PLENUM FLOOR- FIRING RANGE
37213	M09106	"	"	LEAD- ARMS RM FLOOR- SUPPLY
37214	M09206	"	"	LEAD- SUPPLY RM SHELF- COUNTER
37215	M09306	"	"	LEAD- SUPPLY RM FLOOR, UNDERNEATH SHELF
37216	M09406	"	"	LEAD- TOP OF ICE MACHINE- KITCHEN
37217	M09506	"	"	LEAD- TOP OF FLOOR SWEEPER- UTIL. RM
37218	M09606	"	"	LEAD- UNDER FOLDING TABLE- UTIL RM
37219	M09706	M09706 on container	"	LEAD- SHELF UNDER AC UNIT- 2 ND SUP. RM
37220	M09806	"	"	LEAD- SHELF IN 2 ND STOR. RM

CHAIN OF CUSTODY

Relin (Sign) <u>Non-Responsive</u>	Date / Time <u>9-29-06 6:45</u>	Rec (Sign) <u>Non-Responsive</u>	Date / Time <u>10/2/06 1:52</u>
Relin (Signature)	Date / Time	Rec (Sign)	Date / Time



**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 9-25-06 Purchase Order No. N/A

Company Name MINCKLER & Associates

Address 1503 ZALGER DR.

Colorado Springs, CO 80915

City Non-Responsive

Person to Contact Non-Responsive

Telephone (719) 510-9517

Fax Telephone (509) 757-4846

Billing Address (if different from above)

MR KEN FULLER, NATIONAL GUARD BUREAU
COLLEGE PARK, GEORGIA

Quote No. N/A

Sample Collection

Sampling Site Selma Armory, Selma, AL

Industrial Process Administration

Date of Collection 9-25-06

Time Collected 12:30 - 1600

Date of Shipment 9-30-06

QC Requirements ☒ Standard ☐ Other

Collector's Name Non-Responsive

Signature Non-Responsive

REQUEST FOR ANALYSES

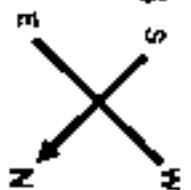
5318

Laboratory Use Only	Client Sample Number	Media Type*	Sample Volume (Liters)	ANALYSES REQUESTED - Use Method Number if Known
37221	M09906	Lead wipe	10"X10"	LEAD-MAINT. BRANCH SHELF, RM 178
37222	M10006	"	"	LEAD-WEIGHT RM FLOOR
37223	M10106	"	"	LEAD-UNDER CANDY MACH-DRILL HALL FLOOR
37224	M10206	"	"	LEAD-DRILL HALL FLOOR-NORTHEAST
37225	M10306	"	"	LEAD-(MAINT) ^{2ND SUPPLY} STORAGE ^{FOLDING} CHAIR ^{UNDER}
37226	M10406	"	"	LEAD-MEN'S LOCKER RM FLOOR
37227	M10506	"	"	LEAD-S-1, RM 129, SHELF
37228	M10606	"	"	LEAD- V2 FLOOR GARAGE DOOR SURFACE.
37229	M10706	"	blank	
37230	M20506	plastic bag	bulk	LEAD- paint chips-large classrm wall
set 5269	M20606	plastic bag	bulk	MOLD- ceiling TILE-large classroom

CHAIN OF CUSTODY

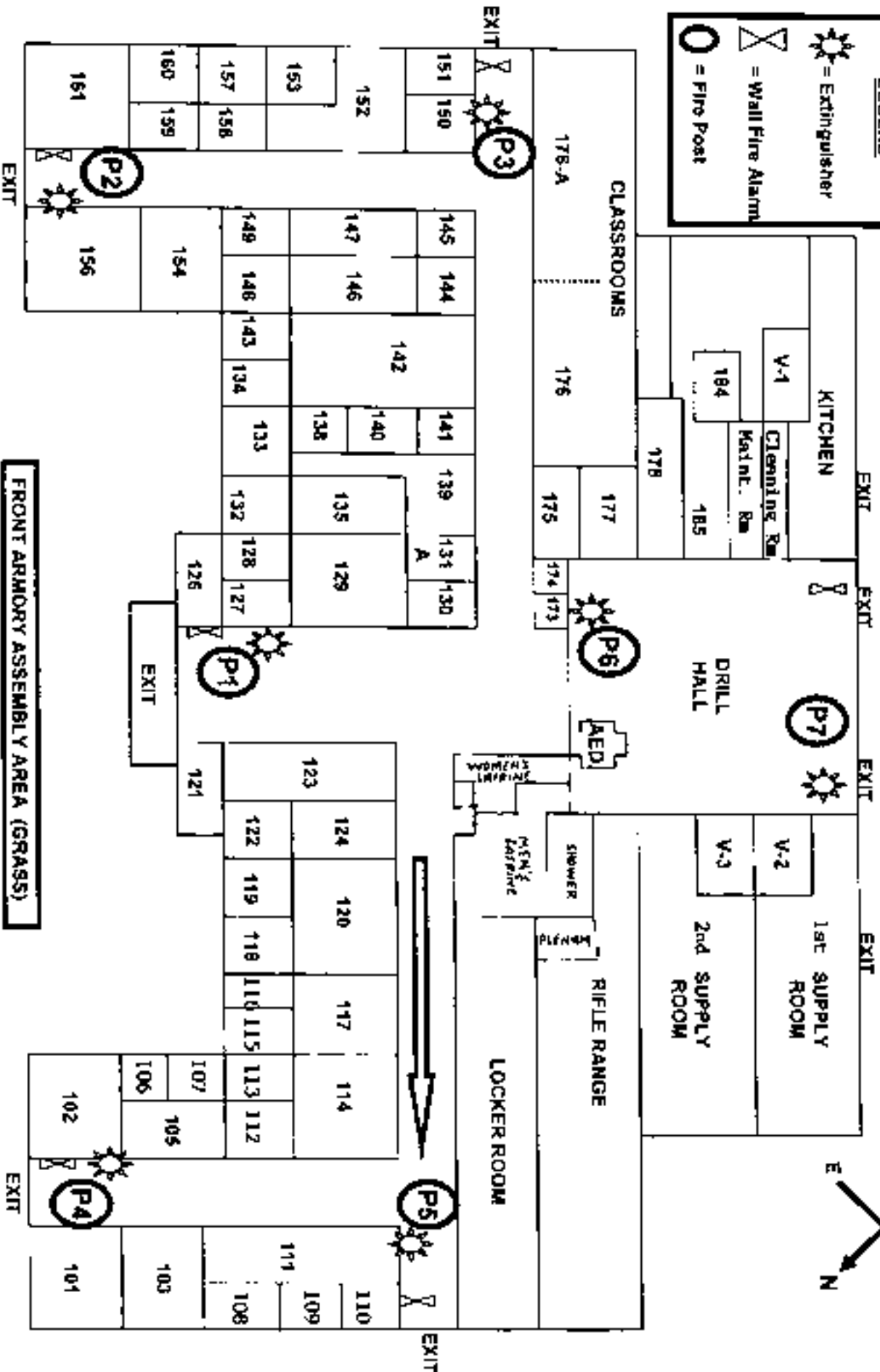
Relinquish (Signature)	<u>Non-Responsive</u>	Date / Time	Rec (Sig)	<u>Non-Responsive</u>	Date / Time
Relinquish (Signature)		9-29-06 6:41 pm	Rec (Sig)		

FIRE STATIONS FIRE AND EVACUATION STANDING OPERATING PROCEDURES



LEGEND

- = Extinguisher
- = Wall Fire Alarm
- = Fire Post



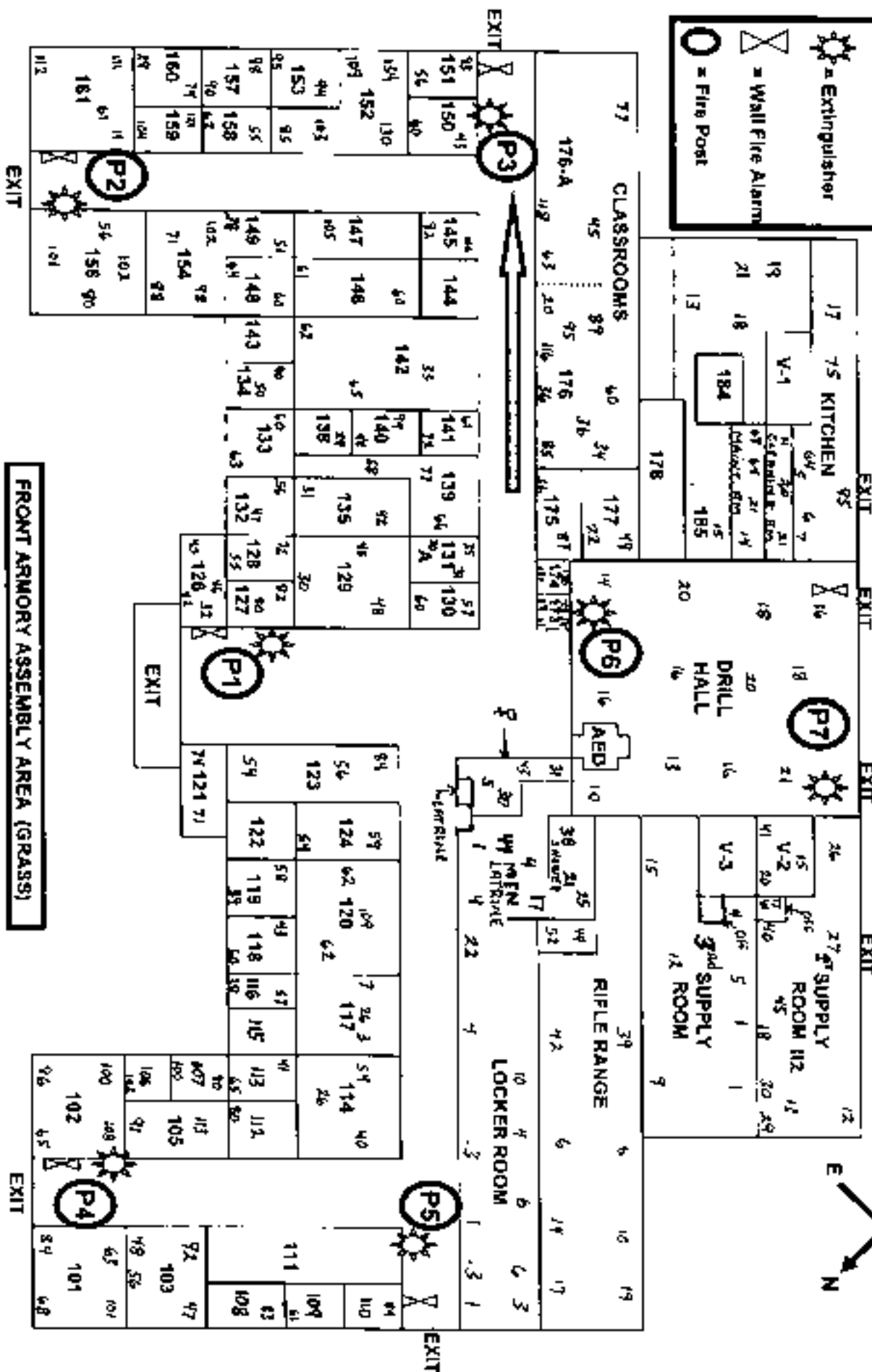
ATTACHMENT - A
OFFICIAL

FIRE STATIONS FIRE AND EVACUATION STANDING OPERATING PROCEDURES



LEGEND

- = Extinguisher
- = Wall Fire Alarm
- = Fire Post



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 ~~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/ripamph.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 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 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.

Prevention of Mold in Dwellings

As part of routine building maintenance, buildings should be inspected for evidence of water damage and visible mold. Water damage should be corrected early (within 48 hours) and building surfaces or furnishings dried to prevent mold growth. If any type of visible mold growth is found, whether *Stachybotrys* or any other mold, the water damage leading to it should be corrected and visible mold removed by appropriate methods as described below.

Correction of Visible Mold

Visible mold should be removed by the simplest and easiest method that is proper and safe. Common household molds found around bathtubs or between shower tiles should be removed with a household cleanser. For building components like walls or ceilings showing any type of fungal growth, including *Stachybotrys*, specific methods for removal are based on the extent of visible contamination and underlying water damage. New York City Department of Health produced a set of voluntary guidelines in April, 2000 that incorporate the best available knowledge on removing mold contaminated building components. Their recommendations are summarized here, but the full text should be consulted before deciding on a remediation strategy. Text is available at the New York City Department of Health website listed at the end of this document.

- 1) **Level I** : If the area of mold is small and isolated (10 square feet or less) – e.g., ceiling tiles, small areas on walls
 - A) The area can be cleaned by individuals who have received training on proper clean up methods, protection and potential health hazards. These individuals should be free from asthma, allergy and immune disorders. Gloves, eye protection and an N95 disposable respirator (available at neighborhood hardware stores) should be worn.
 - B) Contaminated material that cannot be cleaned should be removed and placed in a sealed plastic bag before taking it out of the building. This will prevent contamination of other parts of the building.
 - C) The work area and areas used by the remediation workers while exiting the building should be cleaned with a damp cloth or mop. All areas should be left dry and visibly free of mold contamination and debris.
- 2) **Level II**: mid-sized isolated areas (10-30 square feet) – e.g., a wallboard panel

The recommendations are the same as Level I, with the added precaution that

- A) Moldy materials should be covered with plastic sheets and taped before any handling or removal is done. For instance, a moldy panel of gypsum wallboard should have plastic sheeting taped over the affected area on the wall before it is cut to remove the contaminated section. Once cut from the wall, that section should be placed inside another layer of plastic and sealed up with tape before it is carried through the building for disposal.

- B) Following removal of contaminated material, the work area and exit areas should be HEPA vacuumed (a vacuum equipped with a High-Efficiency Particular Air filter) in addition to cleaning with a damp cloth or mop.
- 3) Levels III, IV, V: Large area (more than 30 square feet) – e.g., several wallboard panels or more

A health and safety professional with experience performing microbial investigations should be consulted prior to any cleaning activities to provide oversight for the project. See the specific recommendations in "Guidelines on Assessment and Remediation of Molds in Indoor Environments", New York City Department of Health, on their website (see Additional Resources). If you do not have access to the Internet you may request a copy through the California Department of Health Services Indoor Air Quality Assistance Line at (510) 540-2476.

Summary

Exposure to high levels of *Stachybotrys chartarum* and other mold spores may cause health symptoms in some individuals. Therefore, any fungal growth on building materials should be cleaned off or removed as rapidly as possible to maintain a healthy indoor environment. New York City Department of Health guidelines provide detailed information on mold remediation strategies and are available from their website (see Additional Resources).

At present there is no environmental test to determine whether *Stachybotrys* growth found in buildings is producing toxins. There is also no blood or urine test that can establish if an individual has been exposed to *Stachybotrys chartarum* spores or its toxins. Anyone with persistent health problems that they believe may be related to indoor molds should consult their physician.

Additional Resources

New York City Department of Health. Guidelines on Assessment and Remediation of Molds in Indoor Environments. Full text document available at <http://www.ci.nyc.us/health>. For further information about this document contact New York City Department of Health at (212) 788-4290.

U.S. E.P.A. Indoor Air Quality Web Site -- Mold Links and General Information Page
<http://www.epa.gov/tedweb00/pubs/moldresources.html>

U.S. E.P.A. Indoor Air Quality Information Clearinghouse: 1-800-438-4318
For information on many types of indoor air contaminants.

Centers for Disease Control and Prevention. Questions and Answers on *Stachybotrys chartarum* and other molds <http://www.cdc.gov/nceh/aslhwa/factsheets/molds/default.htm>

Attachment 7

REFERENCES:

- a) Title 29, Code of Federal Regulations (CFR) Part 1910, Occupational Safety and Health Administration (OSHA).
- b) Army Regulation (AR) 40-5, 22 July 1995, Medical Service, Preventive.
- c) AR 11-34, 15 February 1990, The Army Respiratory Program.
- d) AR 385-10, 29 February 2000, Army Safety Program.
- e) FC-Reg. 385-2, 1 July 1999, Ionizing and Nonionizing Radiation Protection Program
- f) Department of the Army Pamphlet (DA PAM) 40-501, 10 December 1998, Hearing Conservation Program.
- g) Department of the Army Pamphlet (DA PAM) 40-50
- h) Technical Bulletin 43-0242, CARC Spot Painting, January 1991
- 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) Technical Guide (TG) 144, Guidelines for Controlling Health Hazards in Painting Operations, August 1988
- l) Industrial Hygiene/Preventive Medicine Mold Assessment Guide. TG 278
- m) National Guard Regulation (NGR) 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- n) HUD Guidelines, Appendix 7.3, Lead-Based Paint Abatement Specification
- o) Smoke-Free DoD Facilities, January 2, 2001
- p) Industrial Ventilation, 23rd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- q) IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.



Drill Hall

Photo No.1



2nd Supply Room Wall and Ceiling

Photo No.2



Northwest Floor, Old Indoor Firing Range

Photo No.3



Middle Floor, Old Firing Range

Photo No.4



Backstop, Old Indoor Firing Range

Photo No.5



Tray Holder, Old Firing Range

Photo No.6



Plenum Floor, Old Firing Range

Photo No.7



Arms Room Floor, Old Firing Range

Photo No.8



Supply Room Counter Shelf

Photo No.9



Supply Room Floor, Under Shelf

Photo No.10



Ice Machine Surface, Kitchen

Photo No.11



Top of Floor Sweeper, Utility Room

Photo No.12



Under Folding Table, Utility Room

Photo No.13



2nd Supply Room Shelf, Under AC Unit

Photo No.14



2nd Supply Storage Room Shelf

Photo No.15



Maintenance Branch Shelf, Room 178

Photo No.16



Weight Room Floor

Photo No.17



Under Candy Machine, Drill Hall

Photo No.18



Northeast Drill Hall Floor

Photo No.19



2nd Supply Storage Rm., Under Chair

Photo No.20



Men's Locker Room Floor

Photo No.21



S-1, Room 129, Shelf

Photo No.22



Drill Hall Garage Door

Photo No.23

Attachment 9

Recommendations:

- a) Conduct semi-annual inventories on all chemicals in the facility. Ensure that MSDS's are on hand for each cleaning product. (RAC 3)
- b) Due to the lead dust wipe results, it is recommended that the old indoor firing range be thoroughly cleaned from top to bottom to include the floor, back stop, firing line trays, the plenum floor and the light fixtures/covers. Also, the arms room floor, the floor sweeper and the folding tables in the utility room; room 185 shelves, and the drill hall floor must be thoroughly wiped down and or wet mopped with an industrial cleaner using tri-phosphates, Mr. Kleen or Spic-n-Span. For additional lead clearing measures, see attachment 5. (RAC 1)
- c) Replace the ceiling tile in the classroom, storage room 185, room 156, and room 129 to eliminate the mold and dust. See attachment 6 for additional cleaning measures. (RAC 3)
- d) Submit a work order to facilities maintenance office to check the roof leaks. (RAC 3)
- e) Repair, replace, and/or fix the lighting and area deficiencies in paragraph 4 of the report. (RAC 2)
- f) Update all fire extinguishers with gauges and inspection tags in the facility. Each month ensure that the devices are turn upside down and tapped with a rubber mallet to loosen any material at the bottom. Also, update the Auxiliary External Defibrillator power pack. (RAC 2)
- g) If work practices change, a new assessment should be made on the controls in place.



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

NGB-ARS-SEIH

16 January 2007

MEMORANDUM THRU COL [REDACTED] **Non-Responsive** Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: LT [REDACTED] Facility Supervisor, 2382 Gilmer Ave, Tallassee, AL 35702.

SUBJECT: Industrial Hygiene Special of the Tallassee Armory.

1. References.

- a. Report completed 22 December 2006, Industrial Hygiene report for Tallassee Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC **Non-Responsive** of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Tallassee Armory.

b. **Non-Responsive** of OSHA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Discuss the lead samples above 200 micrograms taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines for converting indoor firing ranges to other uses and NG REG 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges. (RAC 1)**

b. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

c. **Hazardous communication or HAZCOM refresher training.** Continue with annual HAZCOM Training. Dated and signed records should be maintained of all HAZCOM training administered.

d. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin.

RAC 3, AR 40-5

e. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non-functioning light fixtures.

f. 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. RAC 3 AR 40-5

g. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

h. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ **Non-Responsive** Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC **Non-Responsive** Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

OSHEA II
IH CONSULTING

Alabama Army National Guard
Tallassee Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: LT [REDACTED]
Armory Supervisor, 731st and 158th Maintenance Company, Tallassee, Alabama
36078

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module
(HHIM) Survey of 731st and 158th Maintenance Company, 2832 Gilmer Avenue
Tallassee, Alabama 36078

December 22, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

Oshes II Industrial Hygiene Consulting
IH Survey Tallassee Amory

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at 731st and 158th Maintenance Company, Tallassee, Alabama. 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: 731st and 158th Maintenance Company is housed in the John Dewey Piper Armory. Ten full time individuals perform administrative duties. The armory was constructed in the 1970's and is approximately 10,950 square feet. It contains several offices/eight administrative areas, one combined kitchen/mess hall, supply rooms, weapons room/vault and an indoor firing range. The armory was well kept but there was evidence of leaking. Ceiling and floor tile was intact with no visible signs of friability.



The drill hall floor is tiled.



(hallway of offices in the armory) North and south ends





(The armory contained several offices)



Administrative areas



In the administrative office area of the armory phone answering, computer use and paper generation is performed.





Supervisor's office

Supply storage area (below)





(indoor firing range) The range is used for storage.





It was stated that the range had not been used in years. Wipe samples were obtained of the bullet stop. The results will be addressed later in the report.

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 and evaluated for the armory's inventory.

Oshea II Industrial Hygiene Consulting
IH Survey Tallahassee Armory

c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	75.1-----77.4	50----100
Class room	62.2-----75.1	50--100
Class room 2	59.2-----61.6	50----100
Kitchen	47.8-----52.2	50--100
Admin areas	59.7-----68.5	50----100
Firing range	30.5-----31.9	5--10
Vault	25.1-----28.9	50----100
Supply	15.1-----18.4	50----100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

e. **Wipe sampling:** Wipe samples were obtained from the following areas: the bullet backstop of the firing range, dusty horizontal surfaces in the drill hall/assembly area and the kitchen. Thirty-four wipe samples were collected and sent to the laboratory for lab analysis. All samples were analyzed for lead. Sample results were below reading limits (BRL) in the kitchen and the drill hall. Samples obtain in the indoor firing ranges all revealed the presence of lead. These samples were taken from the top, middle and bottom, from the left side, the center and the right side of the bullet stop.



Lead Sample Results of Bullet Stop

Sampling was performed in the visible areas of the bullet stop.

Sample Number	Sample Location	Sample results
71100	Bullet stop	606 Micrograms
71101	Bullet stop	101Micrograms
71102	Bullet stop	50Micrograms
71103	Bullet stop	53 Micrograms
71104	Bullet stop	65 Micrograms
71105	Bullet stop	33 Micrograms
71106	Bullet stop	50 Micrograms
71107	Bullet stop	65 Micrograms
71108	Bullet stop	87 Micrograms
71109	Bullet stop	152Micrograms
711010	Bullet stop	397 Micrograms
711011	Bullet stop	92 Micrograms
711012	Bullet stop	73 Micrograms
711013	Bullet stop	83 Micrograms
711014	Bullet stop	72 Micrograms
711015	Bullet stop	26 Micrograms
711016	Bullet stop	78 Micrograms
711017	Bullet stop	29 Micrograms
711025	Bullet stop	22Micrograms
711031	Bullet stop	24 Micrograms
711032	Bullet stop	107 Micrograms
711033	Bullet stop	49 Micrograms
711034	Bullet stop	49 Micrograms

f. **Motor Pool Area:** The motor pool area located behind the armory. Vehicles are used during drills. Armory's personnel perform no maintenance operations or vehicle repairs.

g. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

h. **Arms Room/Weapons Vault:** Weapons are stored 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.

i. **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. [REDACTED] NGB Regional Industrial Hygienist at 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office

ATTN: LTC [REDACTED]

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office

ATTN: Major [REDACTED]

1720 Congressman Dickerson Dr.
Montgomery, AL 36106

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

Enclosure No. 1

DD2214 -Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)											
1. DATE (YYYYMMDD) 2006 / 12 / 04					2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</div> <div style="font-size: small; margin-top: 5px;">1- INITIAL SURVEY 2- RESURVEY 3- OTHER</div>						
3. SOUND LEVEL METER			4. MICROPHONE			5. CALIBRATOR					
a. MANUFACTURER Extech			a. MANUFACTURER			a. MANUFACTURER Extech					
b. MODEL 407703		c. SERIAL NO. 041002810		b. MODEL		c. SERIAL NO.		b. MODEL 7703A		c. SERIAL NO. 4XX69	
d. LAST ELECTROACOUSTIC CALIB DATE YR/ M/D 06/03/06				d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D				d. LAST ELECTROACOUSTIC CALIB DATE YR/M/D 06/03/06			
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>						7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>					
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Tallassee Armory 1101 Chappie James Ave. Tallassee, AL 36083								9. PRIMARY SOURCE OF NOISE Trucks			
								10. SECONDARY SOURCE OF NOISE			
11. SOUND LEVEL DATA								12. PROTECTION REQUIRED (per 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)	d. PLUG + MUFF + TIME LIMIT (Greater than 118)			
5 Ton truck	S		88.3			X					
HUMMWV	S		86.8			X					
2.5 Ton truck	S		87.4								
5 KW generators	S		89.9								
NOTES: Range of levels noted by F (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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.											
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) All who work in this shop area											
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION											
a. NAME (Last, First, Middle Initial) SGT [REDACTED]				b. TELEPHONE (include area code) 334-727-0800				c. ORGANIZATION Tallassee 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

Cleanser
Bleach
Detergent
Air freshener
Glass cleaner

Enclosure No 3

Laboratory Analysis

Enclosure No. 4

Analytical Environmental Services, Inc.

Date: 12/27/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: OSHEA II
Project: Tallapoosa
Delivery Order:
PO No:

Lab Order: 0612A02
Date Received: 12/18/2006 1:05 PM
Matrix: Wipe

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0612A02-001A	71100	66	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-002A	71101	101	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-003A	71102	56	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-004A	71103	54	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-005A	71104	65	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-006A	71105	44	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-007A	71106	50	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-008A	71107	65	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-009A	71108	87	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-010A	71109	152	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-011A	711010	497	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-012A	711011	92	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-013A	711012	74	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-014A	711013	83	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-015A	711014	72	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-016A	711015	26	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-017A	711016	78	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-018A	711017	29	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-019A	711018	BR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-020A	711019	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-021A	711020	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-022A	711021	BR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-023A	711022	BR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-024A	711023	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-025A	711024	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-026A	711025	22	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-027A	711026	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-028A	711027	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-029A	711028	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-030A	711030	HR1	µg. Total	20	1	12-6-2006	12-22-2006	JY
0612A02-032A	711032	24	µg. Total	20	1	12-6-2006	12-22-2006	JY

Qualifiers: BR1 - Not Detected at the Reporting Limit

HR - Laboratory Error

Results are blank corrected where applicable

Page 1 of 2

Analytical Environmental Services, Inc.

Date: 12/27/2006

**TOTAL LEAD IN WIPE SAMPLES
N7082**

CLIENT: OSHSEA II

Lab Order: 0612A02

Project: Tallahassee

Date Received: 12/18/2006 1:05 PM

Delivery Order:

Matrix: Wipe

PO No:

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0612A02-033A	711032	107	µg, Total	20	1	12-6-2006	12-22-2006	JY
0612A02-034A	711033	49	µg, Total	20	1	12-6-2006	12-22-2006	JY

Qualifiers

NDL - Not Detected at the Reporting Limit

DF - Dilution Factor

Results are blank corrected where applicable

Page 2 of 2

Full Time Personnel

Requested but not furnished.

Enclosure No. 5

BEST AVAILABLE COPY

HHIM

Enclosure No.6

HHIMS

INDUSTRIAL HYGIENE SURVEY FORM

ARLOC 01000

INSTALLATION AARNG

BLDG _____

ROOM _____

LOCATION	OPERATION	SURVEY DATE	EVALUATOR	MACOM
AA	ADO	YR 06/ 12/06	KJS	NG
SUPERVISOR	ORGANIZATION			RAC
Lt. [REDACTED]	Talladega Armory 2832 Gilmer Ave. Talladega, AL			3
PH NO.	COMMERICAL/DSN	FREQUENCY	# CIV	# MIL
334-283-2055	x /	6-8 hours/ day	10 /	/
LAB HOODS	VAPOR/DEGREASERS	PAINTBOOTH	SANDBLASTING BOOTH	OPEN SURFACE
0	1	0	0	0
NO VENTILATION UNITS				
CONTROLS PRESENT	EVALUATION	UNIT CODE	CONTROLS REQUIRED	

PPE	REQUIRED	UTILIZED		
GLOVES	R U	RESPIRATOR	R U	EYES/FACE
ACID	___	AIRLINE	___	CHEM/SPLASH
COLD SURFACE	___	ABRASIVE BLASTING HOOD	___	FULL FACE SHIELD
HOT SURFACE	___	DISPOSABLE	___	CHEM/SAF IMPACT
x / x				
NBC AGENTS	___	FULL FACE AIR PURIFYING	___	SAFETY IMPACT
OIL	___	1/2 FACE AIR PURIFYING	___	WELDING HELMET
SOLVENTS	___	POWERED AIR PURIFYING	___	WELDING GOGGLES
SURGICAL GLOVES	___	1/4 FACE AIR PURIFYING	___	LASER EYE PROTECT
OTHER	___	SCBA	___	OTHER

EARS/ HEARING	R U	BODY	R U	HEAD AND FEET	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	POnoiseCO	2	0	Noise, continuous
POFOOTHAZ	POfstress	3	0	Mental / physical stress
POFLYPROJ	POLifting	3	D	Heavy lifting
POEYHAZA	POeyehaza	2	A	Eye Hazards
POFLAMMHAZ				
POLIFTING				
POSHARPOBJE				
POELSHOCK				
COLUBEOIL				

DESCRIBED OPERATION

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

PERSONNEL LIST ATTACHED

Facility layout

Not provided

Enclosure No. 7

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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, Company HHC 3/117th FA, and the 1670th Trans Co., ATTN: SFC [REDACTED] 202 South George Wallace Drive, Troy, Alabama, 36081.

SUBJECT: Industrial Hygiene Survey of the Ft. Ralph Adams National Guard Armory, Troy, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.

- b. Mrs. [REDACTED] of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.

b. Use the report to help in correcting all deficiencies noted by the contractor.

c. **Discuss the high lead levels in the Indoor Firing Range (IFR) with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office.**

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

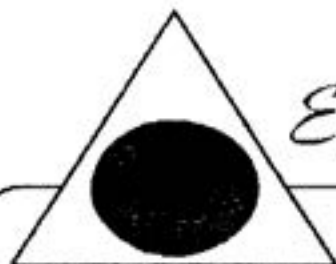
e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the contractors report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR COMMERCIAL (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ **Non-Responsive** Occupational Health Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: HHS 3/117th FA, and the 1670th Trans CO. Attn: Commander, Ft. Ralph Adams National Guard Armory, 202 South George Wallace Dr., Troy, Alabama 36081.

SUBJECT: Industrial Hygiene Survey for the Ft. Ralph Adams National Guard Armory, Troy, Alabama.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Ralph Adams National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Ralph Adams Armory. An interview was conducted with SFC [Non-Responsive] to gather background and historical information relative to the various operations at the Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses. Appendix E includes laboratory results and F includes a list of all personnel working in the Armory.

3. Background. At the request of Mr. [Non-Responsive] of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Ralph Adams National Guard Armory in Troy, Alabama on June 8, 2004 by [Non-Responsive] Industrial Hygienist.

SUBJECT: Industrial Hygiene Survey for the Ft. Ralph Adams National Guard Armory, Troy, Alabama.

4. Facility Description. This facility houses the HHS 3/117th FA and the 1670th transportation CO. A total of eleven full time employees work in the Ft. Ralph Adams Armory. The armory is utilized by supply, administrative, training and recruiting personnel during the week (Monday through Friday) and it is utilized for Guard drill on the weekends. The physical structure is a one story brown brick building. The building was constructed in 1978 another area was constructed in 1985. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Inactive Firing Range	1670 th Admin offices
HHS Supply Room/Vault	933 rd Admin Offices
1670 th Supply Room/Vault	Recruiting office
Classrooms	Retention office
Drill Hall	Male & Female Latrines
Kitchen	
HHS Admin offices	

5. Health Hazard Inventory Module (HHIM) & Risk Assessment Codes - The results of the walk through survey were entered into a health hazard inventory module (HHIM) industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 6055.1 and are reproduced in Appendix C.

6. Findings.

- A. Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room - An initial walk through of the facility revealed that there was an inactive firing range located on the premises. A vehicle maintenance operation was not present and an inactive boiler room was not present.

B. Suspect Asbestos Containing Materials

(1) There were no damaged suspect asbestos containing materials identified in this facility. The ceiling tiles were not suspect asbestos containing however, some tiles were water damaged or missing due to the previously leaking roof. The leaking roof has been replaced and the tiles are scheduled to be replaced.

SUBJECT: Industrial Hygiene Survey for the FL Ralph Adams National Guard Armory, Troy, Alabama.

- C. Supply Room – There are two Supply rooms and Vaults located in this facility. The first supply operation is supported by HHS 3/117th FA and the second supply operation is supported by the 1670 Transportation CO. The HHS supply sergeant is SSG [Non-Responsive] and the 1670th Transportation Company supply sergeant is SSG [Non-Responsive]. The two supply operations are almost identical in function and design. The supply sergeants are responsible for ordering, distributing, and storing military supplies and equipment. The room is secured by lock and key. The ULLS and RCAS computer systems are used in all of the operations. There is no equipment or supplies stored in the 1670th supply operation because the unit has been deployed. The employees working in these operations had no ergonomic concerns or complaints. Radioactive equipment such as chemical detectors are stored inside cabinets under lock and key in the supply room. Signage is needed in the operations to warn employees about the radiation hazard.
- D. Vault – All of the units have security vaults located within the supply room. The vault is used to store military weapons. Weapons repair or maintenance is not performed in the vault. There is only one means of entry and egress and no independent ventilation is present in this operation.
- E. Illumination survey - An illumination survey was conducted in six areas at this facility. The illumination levels in four of the areas surveyed were not within the American National Standards Institute (ANSI) recommended minimum illumination levels.

The illumination levels in the survey can be seen in table II.

TABLE II
Illumination Survey

Location	Illumination Level (ftc)	ANSI Minimum Requirements (ftc)	DG 412-2 Minimum Requirements (ftc)
BN commander	60.0	50 - 100	50
SFC [Non-Responsive]	43.0	50 - 100	50
CO B supply ofc	25.4	50 - 100	50
CPT [Non-Responsive]	46.0	50 - 100	50
SFC [Non-Responsive]	56.0	50 - 100	50
SSG [Non-Responsive] (computer)	46.0	50 - 100	50

Notes: ANSI office illumination depending on the task is 50 ftc for general desk work and 90 ftc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft. Ralph Adams National Guard Armory, Troy, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel for formation. The floor is composed of concrete and the ceiling is composed of a compressed seaweed type material (Tectum) that is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq. ft. guideline as required by NG PAM (AR) 385-16.
- G. Inactive Firing Range – The Ft. Adams Armory is equipped with an inactive indoor firing range. There were no stored items inside the range. The bullet backstop and the sand was still in place along with firing positions. An interview revealed that the firing range has not been cleaned or decommissioned. As required, lead wipe samples were collected from the inactive firing range. Laboratory results revealed that two of the samples taken from the firing range were found to be above 200 micrograms/sq. ft. guidelines as required by NG PAM(AR)385-16.
- H. Kitchen – The kitchen is adjacent to the armory floor and is fully functional. The kitchen is used during drill weekends. Housekeeping was adequate and there were no signs of insects or pests.
- I. Gas pumping operation - A 1000 pound capacity below ground gas tank is located at the Ft. Adams Armory. The armory sells gas to National Guard members and retiree is at a discounted rate as a benefit to members. SFC Non-Responsive pumps gas for customers at established hours during the day as a service. Personal protective equipment (PPE) in the form of gloves are available, a fire extinguisher is also available. Spill Cleanup equipment and supplies were not observed. Material safety data sheets (MSDS) and a hazardous materials inventory list (HMIL) were present in this operation. Signs communicating the flammable hazard were present.

SUBJECT Industrial Hygiene Survey for the FL Julius W. Hicks National Guard Armory, Enterprise, Alabama

Recommendations

- 1 Lighting should be upgraded in all areas that were indicated as deficient
- 2 As required by NG PAM (AR) 385-16, the inactive firing range should be decontaminated and clearance testing should be performed to verify the effectiveness of the cleanup
- 3 Radioactive signage is needed on all cabinets that store equipment with a radioactive source.

SUBJECT Industrial Hygiene Survey for the Ft. Ralph Adams National Guard Armory, Troy, Alabama

Ft. Ralph Adams National Guard Armory
Lead Wipe Sample Analysis
Appendix E

Sample No.	Location	Type Analysis	Micrograms per sq. ft. ug./sq. ft.
T-01	Drill Fl., Overhead door	Lead	54.0
T-02	Drill Fl. Center of Floor	Lead	23.0
T-03	Drill Fl., near kitchen serving station	Lead	46.0
T-04	Kitchen, at entrance	Lead	BRL
T-05	Blank	Lead	BRL
T-06	Supply vent, orderly room	Lead	BRL
T-07	IFR Bullet backstop		5120
T-08	IFR In front of bullet backstop	Lead	1720
T-09	IFR Rear wall next to entrance/ext.	Lead	157
T-10	Blank	Lead	BRL

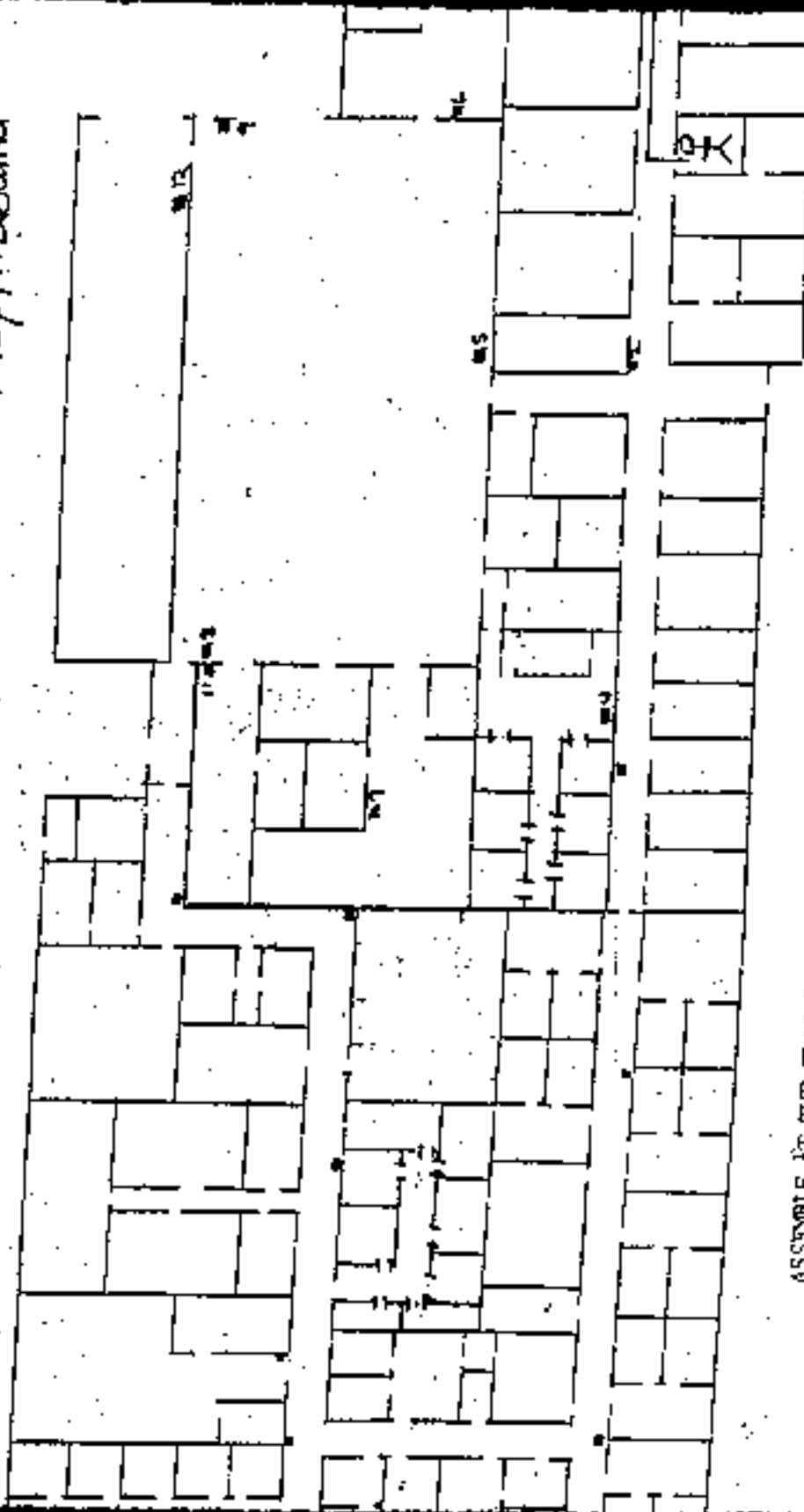
Sample no.	Location	Type of analysis	Ug./sq. ft.
T-11	Sand from pit	Lead	1100
T-12	Sand from pit	Lead	69.6

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APPENDIX A

FIRE EVACUATION DIAGRAM

TROY, Alabama



ASSEMBLE AT THE FLAG POLE IN FRONT OF THE ARMORY

-LEGEND-

Fire Extinguisher

Location

Direction to Exit



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APPENDIX B





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APPENDIX C

Installation

Location: 02c 50 Survey Date: 04/06/08 Year: 04 Month: 06 Day: 08 Sub-MACOM: MG

Operation: SA SAH

Mr. ☒ Supervisor ☐ Ms. ☐

Supervisor or Point of Contact: 334 566

Lab Hoods ☒ Vapor Degreasers ☐ Spray Booths ☐ Open Surface Tanks ☒ Ventilation ☐

	e*	R	U	Manufacturer
Gloves				
acid				
cold surfaces				
hot surfaces				
MBC agents				
oil				
solvents				
surgical gloves				
leather/cotton				
other				
Respirator				
abrasive blasting hood				
disposable				
full face air purifying				
1/2 face air purifying				
powered air purifying				
1/4 face air purifying				
self-contained				
other				

Eyes and Face		Hearing		Body	
e*	R U	e*	R U	e*	R U
chemical splash				canal caps	
full face shield				(>85-100dBA steady) earplugs	
chemical/splatter impact				helmets with muffs	
safety impact				muffs alone	
welding helmet				(108-116) multi-earplug comb	
sunglasses				muffs and earplugs	
welding goggles/glasses				(116 or >) with time limit	
laser eye protection				other	
				other	

Reminders: ergonomics - dermatitis - physical agents - inflammation
 EYE (permanent) _____ EYE (portable) _____
 - SHW - GAN

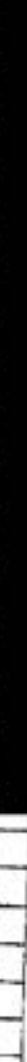
Hazard Description

1

Last Name

[illegible]

First Name



PM

Sem

Category

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Personnel data provided by the facility is attached to this form

Comments

Remember to comment on problems, recommendations, and useful control items

1. Operation described is : SA-H

2. other operations: MAX, LCA

3. No radioactive equipment is stored in this operating

4. The supply room contains few supplies because the unit was mobilized.

U.S. Government Printing Office: 1987

MEDDAC FORM 609-R

Hazard Description

Radioactive Source (tritium)

Last Name

Elcel Mance

[illegible][illegible]

Comments

Remember to comment on problems, recommendations, and needed control items.

7. Operation described is 'SAH'

2. other operations: MANY, LOA

3. Chemical detectors which contain a ^{small} radioactive source is stored in the supply cabinet under lock and key

Installation

02620
Location: GA SAH
Operation: Survey Date: 04/06/08
Year: 04/06/08
Day: MG

Building Number: FT-R-Adams
Sub-MACOM: RAC
MACOM: MG
Unit/Organization: 202 Sg. G. e. b. n. g. e.
W. a. l. a. c. D. r. i. v. e.
T. e. o. y. A. L. 36094

Frequency (hrs/day):
No. CIVs:
No. MIL:
Contractors:
No. LOCs:

Mr. ☒ Ms. ☐Supervisor ☒

Supervisor or Point of Contact telephone Number: 334 566 7014

Commercial ☒

Lab Hoods ☒ Vapor Degreasers ☒ Spray Booths ☒ Open Surface Tanks ☒

Ventilation Units ☒

Controls present (if > 6, continue in comments) [25]

Evaluation [25 char max per line]

Unit Code

Controls Required [25 char max per line]

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Gloves

Respirator

e* R U

e* R U

Manufacturer's Description [10 char max]

NIOSH TC# or foreign equiv. [10 char max]

acid
cold surfaces
hot surfaces
NBC agents
oil
solvents
surgical gloves
leather/cotton
other

abrasive blasting hood
disposable
full face air purifying
1/2 face air purifying
powered air purifying
1/4 face air purifying
self-contained
other

alkaline
canal caps
earplugs
helmets w/muffs
muffs alone
multicarping comb
muffs and earplugs
(110 or >) with tone limit
other
other

aprons
cold weather clothing
coveralls
full body suit
heat reflective vests/suit
safety belt/harness
special purpose clothing
other
other

Head and Feet
cold weather boots/shoes
hard hats
impermeable boots
safety shoes (conductive)
safety shoes (nonconductive)
other
other
other
other

Head and Feet
cold weather boots/shoes
hard hats
impermeable boots
safety shoes (conductive)
safety shoes (nonconductive)
other
other
other
other

Eyes and Face

Hearing

Body

e* R U

e* R U

e* R U

chemical splash
full face shield
chem/safety impact
safety impact
welding helmet
sunglasses
goggles/glasses
laser eye protection
other
other

canal caps
(> 85-100dBA steady) earplugs
helmets w/muffs
muffs alone
multicarping comb
muffs and earplugs
(110 or >) with tone limit
other
other

aprons
cold weather clothing
coveralls
full body suit
heat reflective vests/suit
safety belt/harness
special purpose clothing
other
other

Head and Feet
cold weather boots/shoes
hard hats
impermeable boots
safety shoes (conductive)
safety shoes (nonconductive)
other
other
other
other

evaluator's recommendation

or equipment

Reminders: ergonomics - dermatitis - physical agents - flammable storage
EYE (permanent) - EYE (portable) - SHW - GNV - LEV

ACC ADM DSA DSN LAB LCK
RAD ECB EPL RVS SPR WEL

MEDDAC FORM 609-R

1 MAY 95
#1 HEAD

Requested Record #J-0088 (A)

Released by National Guard Bureau

MEDDAC (P1 HEAD) FORM 609-R
1 MAR 1982

1. Background

Information Systems Problems

First Name

¹ The word *qurʾān* is also used to refer to the Qurʾān.

Phosphorylation by Casein Kinase II, Regulating and Inhibiting 201 Nobel Prize

1. Information displayed is: DHP
2. Other leg, MAN.
3. Kitchen is fully functional and is used during drill weekends.

MEDDAC (P1 HEADS) **FORM 609-R**
1 MAY 95

Hazard Description

First Name

Category

[illegible]

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Remember to comment on problems, recommendations, and needed control items

2. other operations: off, manv.

(Answers continued on attached sheet)

Location: **07C20** Operation: **0TH** Survey Date: **04/06/08** Year: **04** Month: **06** Day: **08** MACOM: **MG** Sub-MACOM: **XA** RAC: **4** Building Number: **FT-R** Room: **1111** Unit/Organization: **202 S. G. W. T. R. A. C. 36087** Floor: **1111** Frequency (hrs/day): **1** No. MIL: **1** No. CIV: **1** Contractors: **1** No. LOCs: **1**

Supervisor: **334** Mr. ☒ Ms. ☐ Supervisor or Point of Contact telephone number: **7014** DSR: **7014** Commercial: ☒ Vapor Degreasers: **566** Spray Booths: **1** Open Surface Tanks: **1** Lab Hoods: **1** Ventilation: **1**

[illegible]

	e	R	U	e	R	U	e	R	U	e	R	U
chemical splash												
full face shield												
chem'safety impact												
safety impact												
welding helmet												
sunglasses												
laser eye protection												
other												
canal caps												
(>65-100dBA steady) earplugs												
helmets w/muffs												
muffs alone												
(108-118) multi/caplug comb												
muffs and earplugs												
(118 or >) with line link												
other												
other												
Body												
aprons												
cold weather clothing												
coveralls												
full body suit												
heat reflective vest/suit												
safety belt/disarms												
special purpose clothing												
other												
other												
Head and Feet												
cold weather boots/shoe												
hard hats												
impermeable boots												
safety shoes (conductive)												
safety shoes (nonconductive)												
other												
other												
other												
other												

Reminders: ergonomics - dermalitis - physical agents - flammable substances

The evaluator's recommendation

Reminders: ergonomics - dermatitis - physical agents - flammable storage
EYE (permanent) ____ - EYE (portable) ____ - SHW - GMY - LEV

Richard Linford

2007

11234.41 Jms = 110.011

[illegible]

Leod. class.

Social Security Number
Street Address (Mailing)

LactiChips®

John Haring

All Ser Category

[illegible]

~~BEST AVAILABLE COPY~~

[illegible]

2014

Relevance of Environment to Job/Person, Organization and (non-)control fit

Introduction

2-Other Operations: LCA, MAN:

3. Vehicles are driven onto the floor and weapons are also cleaned on the floor.

7. road wipe samples were taken on the drill floor and the results revealed the following: with a 100 ft. road wipe sample is one above the maximum

MEDDAC (P.T. MEAD) FORM 609-R
1 MAY 85

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APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2500
21 January 1994

NO P&M (AR) 385-10
ANGPAM 01-101

Safety

GUIDELINES FOR CONVERTING INDOOR FIRING RANGES TO OTHER USES

Summary. This is a new pamphlet. The guidance describes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. The guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulation/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVN-5).

Impact on New Manning System. This guidance does not contain information that affects the New Manning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau, Attn: NGB-AVN-51, 311 South George Mason Drive, Arlington, VA 22204-1382.

Distribution. Distribution of this publication is made in accordance with the requirements on DA Form 12-09-E.

CONTENTS (Listed by paragraph numbers)

Glossary

	Para
Purpose	1
References	2
Explanation of abbreviations and terms	3
Policy and procedures	4
Goal	5
Background	6
Wipe Sample Media	7
Wipe Sampling Protocol	8
Range Cleaning Instructions	9
Cleaning Stored Contaminated Equipment	10
Contaminated Sand and Lead Waste	11
Medical Surveillance	12
Worker Education	13
Personal Protective Equipment	14
Point of Contact	15

1. Purpose
This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.
2. References
Relevant publications are listed below.
a. DODI 8055.1 (Department of Defense Occupational Safety and Health (OSH) Program).
b. AR 11-34 (The Army Respiratory Protection Program).
c. AR 40-3 (Preventive Medicine).
d. NGR (AR) 385-15 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).
e. TB MED 402 (Occupational and Environmental Health Respiratory Protection Program).
f. USAEHA TO 141 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).
g. Title 29, Code of Federal Regulations (CFR) revision, Part 1910 (Occupational Safety and Health Standards).

Appendices
A. Sampling Strategy for Collection of Wipe Samples
B. Interpretation of Sample Results (Prior to Cleaning)
C. Interpretation of Sample Results (After Cleaning)
D. OSHA Instruction CPL 2-220B
E. Where to Purchase Sample Media and Containers
F. AENH Form 8-R (Bulk Sample Data)
G. Instructions to Complete AENH Form 8-R
H. Examples of Computation of Lead Level from Wipe Sample Results
I. Supporting Laboratories and Areas Served

21 January 1984

HQ PAH (AR) 385-16ANCPAH 67-101

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

b-1 200 micrograms/sq ft or LESS

If all sample results are 200 micrograms/sq ft or less, the range can be converted and/or used for any purpose.

b-2 BETWEEN 201 and 200,000 micrograms/sq ft

Range must be overcleaned. Continue with cleaning instructions listed in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

b-3 OVER 200,000 micrograms/sq ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/sq ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/sq ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/sq ft limit.

b-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substrate. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE, that if your original range sample results were, i.e., 175,000 ug/sq ft then you would have to reduce the lead level below 13,125 ug/sq ft. This would meet the 75 percent reduction criteria. However, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will allow the latex paint to adhere to the substrate. If the paint peels, due to the floor and is brushed over a period of time, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the cleaned range for signs of peeling paint. Paint chips can be analyzed for lead content. DO NOT IGNORE PEELING PAINT IN A CONVERTED INSOLA FILING RANGE.

APPENDIX C INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

C-1 200 micrograms/sq ft or LESS

If all sample results are less than 200 micrograms/sq ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substrate.

C-2 ABOVE 200 micrograms/sq ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/sq ft level. If all sample results meet this criteria, a contrasting color of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of kitchen equipment and food is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

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APPENDIX E

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APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Ralph Adams National Guard Armory, Truf, Alabama.

Fort Ralph Adams Armory
Employee List

	Non-Responsive	
1.		PT
2.		CPT
3.		SG
4.		- SFC
5.		SFC
6.		SFC
7.		
8.		SSG
9.		S
10.		SSG
11.		- SGT



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

NGB-ARS-SEIH

16 January 2007

MEMORANDUM THRU COL [Non-Responsive] Deputy State Surgeon, Joint Forces Headquarters (JFHQ), Alabama Army National Guard, 5300 57th Street, North Birmingham, AL 35217-3399.

TO: Alabama Army National Guard, ATTN: SGT [Non-Responsive] Facility Supervisor, 1101 Chappie James Ave, Tuskegee, AL 36083

SUBJECT: Industrial Hygiene Special of the Tuskegee Armory.

1. References.

- a. Report completed 22 December 2006, Industrial Hygiene report for Tuskegee Armory.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, 22 July 2005.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 29 February 2000, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 10 December 1998, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program, 30 October 2000.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 25th ed, 2005, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.
- k. NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.

2. General.

a. At the request of LTC [REDACTED] of the Alabama State Safety and Occupational Health Office, an Industrial Hygiene Survey was conducted at Tuskegee Armory.

b. b. [REDACTED] of OSHA II conducted the industrial hygiene survey.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.

a. **Discuss the high lead samples taken inside of the inactive indoor firing range with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Request help in eliminating possible employee lead exposures. Be prepared to educate personnel on proper housekeeping procedures of the range. Follow NG PAM 420-15, Guidelines for converting indoor firing ranges to other uses and NG REG 385-15, Policy, Responsibilities and guidelines for housekeeping, rehabilitation and/or conversion of indoor firing ranges. (RAC 1)**

b. Fix the leaks in the roof throughout the armory.

c. **Hearing Conservation Program.** Continue with annual audiometric testing for relevant personnel in accordance with reference 1f. To prevent irreversible hearing loss, always utilize hearing protection around equipment and in areas that indicate noise/caution signs/hearing protection needed. The Risk Assessment Code (RAC) 3, AR 40-501

d. **Hazardous communication or HAZCOM refresher training.** Continue with annual HAZCOM Training. Dated and signed records should be maintained of all HAZCOM training administered.

e. **Solvent Bath Use:** Weapons are never to be cleaned inside the weapon's storage vault or any other enclosed area without adequate ventilation in accordance with references 1b and 1d. Personal Protective equipment, such as goggles, should be worn to protect eyes from splash hazards and gloves should be worn to prevent solvent absorption via the skin.
RAC 3, AR 40-5

f. Light bulbs were blown or not functioning in some of the administrative areas. Replacing blown bulbs will increase illumination levels in the facility. A work order should be submitted to the appropriate office, requesting repair of non-functioning light fixtures.

g. 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. RAC 3 AR 40-5

h. Put a plan in place to correct the deficiencies and let the Occupational Safety and Health Office know in 30 days how you are going to correct all recommendations.

i. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the FMO, the Environmental Office the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the report, please contact **Non-Responsive** Regional Industrial Hygienist, ARNG-IHS, (404) 559-4174.

Non-Responsive

Regional Industrial Hygienist

CF:

Office of the Adjutant General, ATTN MAJ **Non-Responsive** Alabama State Safety and Occupational Health Office, PO BOX 3711, Montgomery, Alabama 36109-0711

Office of the Adjutant General, ATTN: LTC **Non-Responsive** Alabama State Safety and Occupational Health Manager, PO BOX 3711, Montgomery, Alabama 36109-0711

OSHEA II
IH CONSULTING

Alabama Army National Guard
Tuskegee Armory



OSHEA II IH CONSULTING PO BOX 35669 FAYETTEVILLE, NC 28303

MEMORANDUM FOR: Alabama Army National Guard: ATTN: SGT [REDACTED]
Armory Supervisor, Detachment 1, 214 M.P. Company, Tuskegee, Alabama 36083

SUBJECT: Baseline Industrial Hygiene Health Hazard Information Module
(HHIM) Survey of Detachment 1, 214 M.P. Company, 1101 Chappie James
Avenue, Tuskegee, Alabama 36083

December 22, 2006

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.
- c. Army Regulation 11-34, February 1990, The Army Respiratory Protection Program.
- d. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- e. Industrial Ventilation, 22nd Edition, The American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- f. National Guard Regulation 385-10, 20 December 1989, Army National Guard Safety and Occupational Health Program.
- g. IES Lighting Handbook, Application Volume 2000, Illumination and Engineering Society of North America.
- h. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation Program.
- i. Technical Bulletin (TB MED) 503, 1 February 1985, The Army Industrial Hygiene Program.
- j. Army Regulation (AR) 40-5, 15 October 1990, Preventive Medicine.

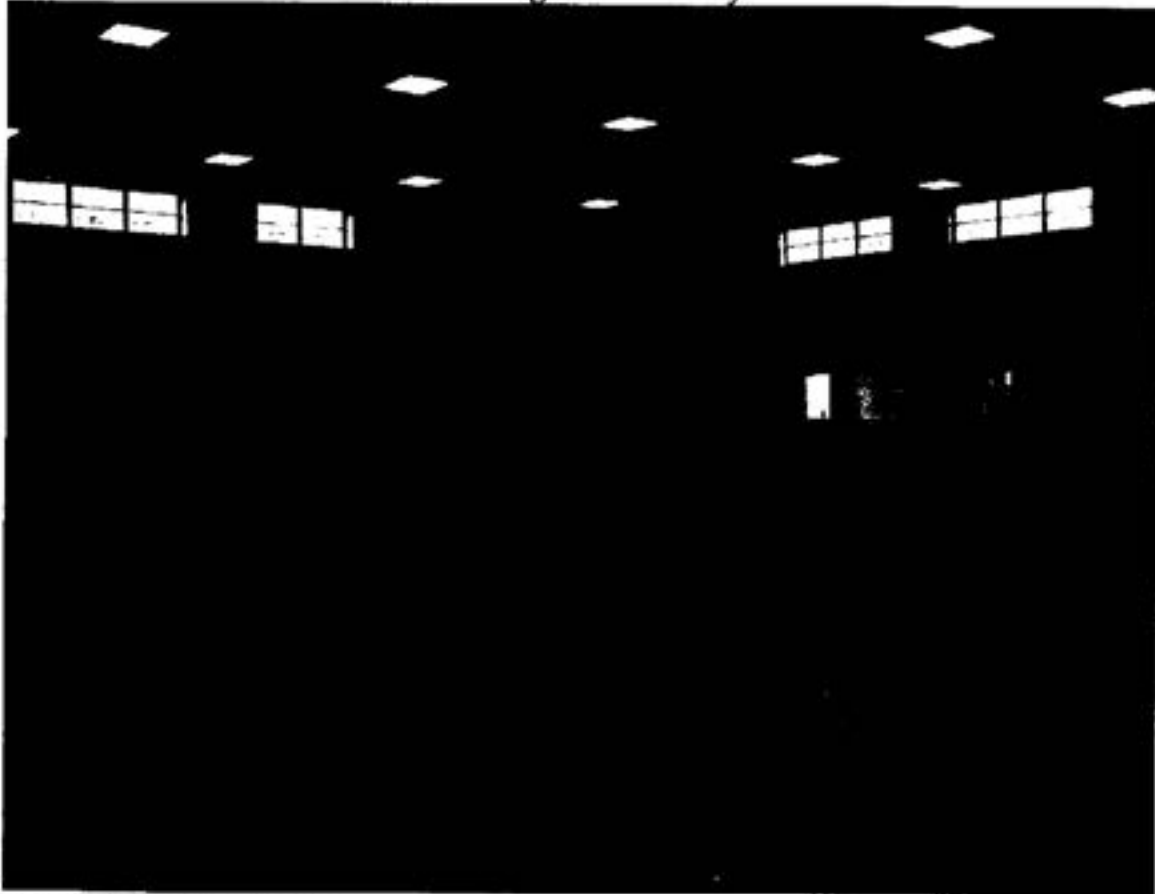
Oshea II Industrial Hygiene Consulting
IH Survey Tuskegee Armory

2. **General:** At the request of Mr. **Non-Responsive** Regional Industrial Hygienist, National Guard Bureau South at Atlanta, Georgia, a Health Hazard Information Module Baseline Survey was performed at Detachment 1, 214 M.P. Company, Tuskegee, Alabama.

3. **Background:** 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: Detachment 1, 214 M.P. Company is housed in the Tuskegee Armory. Nine full time individuals perform administrative duties. The armory was constructed in the 1960's and is approximately 10,000 square feet. It contains several offices/ten administrative areas, one combined kitchen/mess hall, supply rooms, weapons rooms/vault and an indoor firing range. The armory was well kept but there was evidence of leaking. Ceiling and floor tile was intact with no visible signs of friability.



The drill hall floor is tiled.



(hallway of offices in the armory)



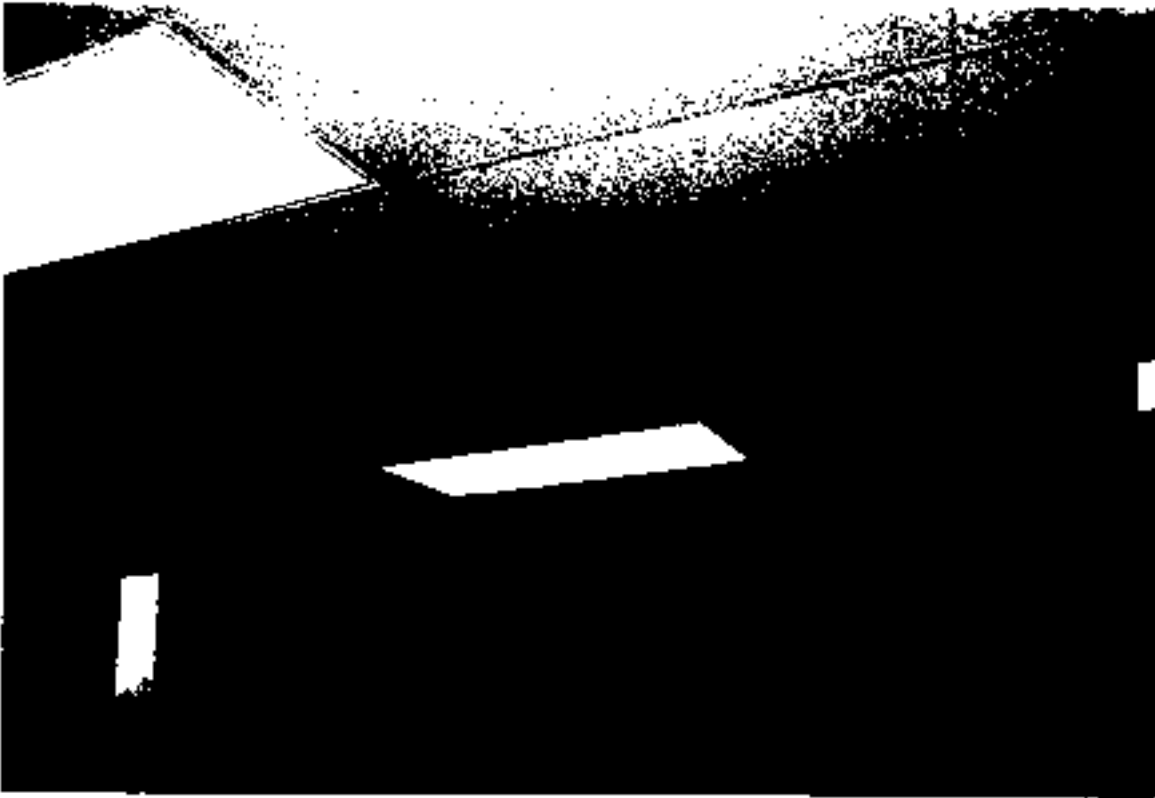
Water circles were noted on ceiling tile of administrative areas.



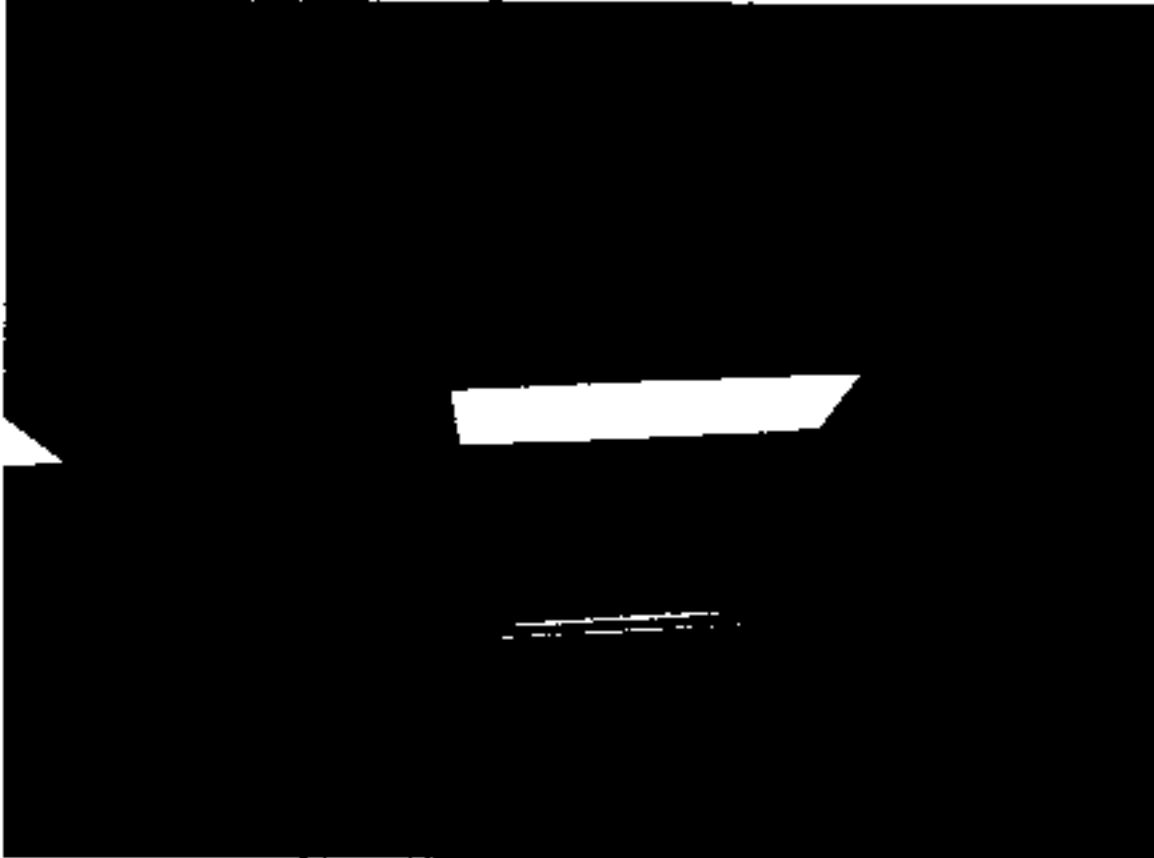
There was evidence of leaking in the ceiling of the kitchen

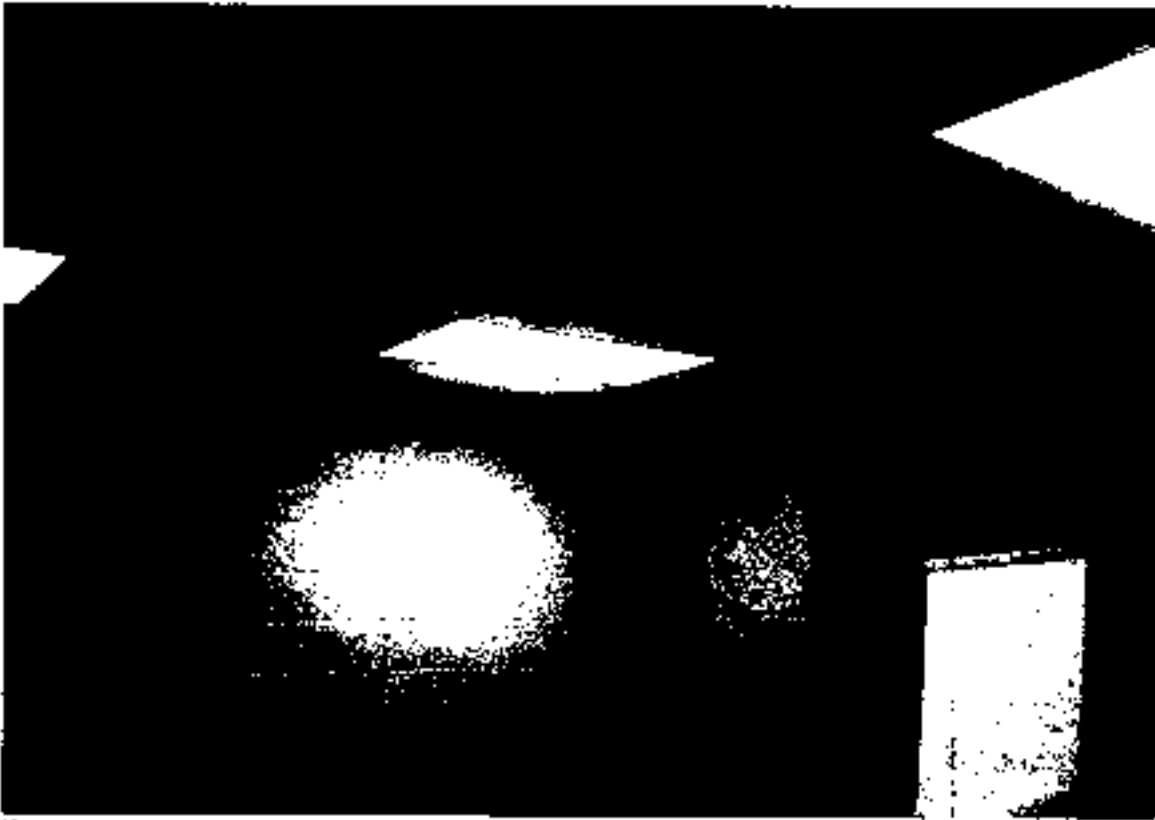


This classroom contained water circles. It leaked during this survey.

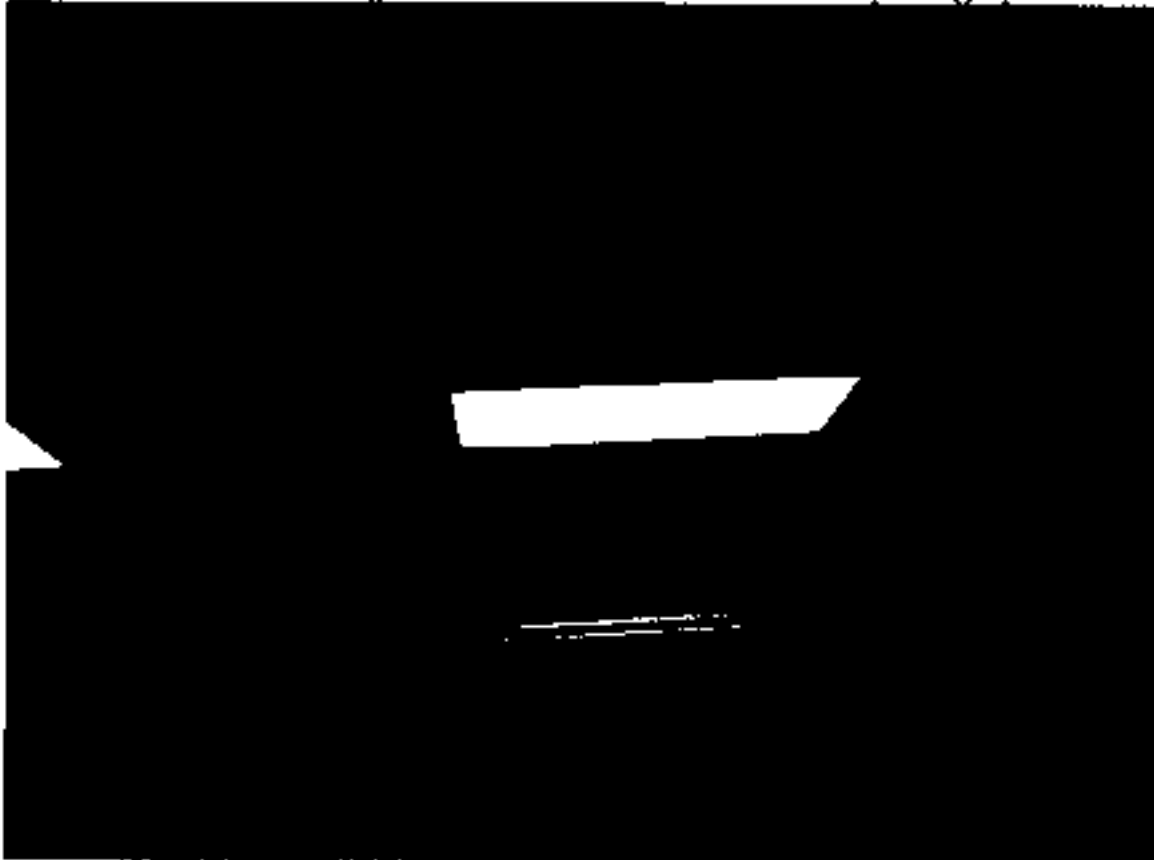


These water circles were in the large classroom.





Evidence of water running down the wall can be seen in this photograph.





Administrative areas



In the administrative office areas of the armory phone answering, computer use and paper generation is performed.



The kitchen is not used to prepare food. Food is contracted out.





It leaked in the kitchen. The leak is noted on the right far side of the light fixture.



(indoor firing range)



Bullet stop



It was stated that the ranged had not been used in years. Wipe samples were obtained of the bullet stop. The results will be addressed later in the report.

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 and evaluated for the armory's inventory.

c. **Illumination:** Illumination levels were recorded in all administrative areas, classrooms, training rooms and supply areas throughout the Armory. See chart below for specific location of measurements.

<i>Location</i>	<i>Illumination level (FTC)</i>	<i>IES Standard (FTC)</i>
Chief's office	62.2—64.7	50—100
Class room	63.2—65.4	50—100
Class room 2	59.2—61.0	50—100
Kitchen	44.4—54.2	50—100
Admin areas	63.7—68.8	50—100
Firing range	27.3—30.6	5—10
Vault	28.1—29.6	50—100
Supply	18.0—19.2	50—100

The majority of readings are at the IES lighting standard for foot candles for each area.

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

e. **Wipe sampling:** Thirty-one wipe samples were collected and sent to the laboratory for lab analysis. Samples were analyzed for lead. Samples obtained in the firing range indicated the presence of lead on the bullet stop. These samples were taken from the top, middle and bottom, from the left side, the center and the right side of the bullet stop.

Lead Sample Results of Bullet Stop

Sampling areas of bullet stops

SAMPLE NUMBER	SAMPLE RESULT	LOCATION
81100	15700 Micrograms	Bullet stop
81102	44500 Micrograms	Bullet stop
81103	53400 Micrograms	Bullet stop
81104	84100 Micrograms	Bullet stop
81105	666000 Micrograms	Bullet stop
81106	269000 Micrograms	Bullet stop
81107	150000 Micrograms	Bullet stop
81108	1980 Micrograms	Bullet stop
81109	3370 Micrograms	Bullet stop
811010	9630 Micrograms	Bullet stop
811011	9540 Micrograms	Bullet stop
811012	13300 Micrograms	Bullet stop
811013	9650 Micrograms	Bullet stop
811014	8490 Micrograms	Bullet stop
811015	941 Micrograms	Bullet stop
811016	999 Micrograms	Bullet stop
811017	11300 Micrograms	Bullet stop
811018	4190 Micrograms	Bullet stop
811019	1720 Micrograms	Bullet stop
811020	2400 Micrograms	Bullet stop
711021	2700 Micrograms	Bullet stop
711022	2180 Micrograms	Bullet stop
711023	1390 Micrograms	Bullet stop
711024	108 Micrograms	Bullet stop
711025	97 Micrograms	Bullet stop
711026	219 Micrograms	Bullet stop
711027	455 Micrograms	Bullet stop
711028	260 Micrograms	Bullet stop
711029	133000 Micrograms	Bullet stop
711030	645 Micrograms	Bullet stop

f. **Motor Pool Area:** The motor pool area located behind the armory. Vehicles are used during drills. Armory's personnel perform no maintenance operations or vehicle repairs.

g. A noise level survey was performed of the vehicles located on site. Noise hazard caution signs are posted on vehicles and hearing protection is available and easily assessable for personnel and visitors.

h. **Arms Room/Weapons Vault:** Weapons are stored 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.

i. **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 **Non-Responsive**
NGB Regional Industrial Hygienist at 1-404-559-4174

Non-Responsive

Industrial Hygienist

CF: State Safety Office
ATTN: LTC **Non-Responsive**
1720 Congressman Dickerson Dr.
Montgomery, AL 36106

CF: Occupational Health Office
ATTN: Major **Non-Responsive**
1720 Congressman Dickerson Dr.
Montgomery, AL 36106

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

Enclosure No. 1

DD2214 - Sound Level Survey

Enclosure No. 2

NOISE SURVEY (Sound Level Meter Survey)								
1. DATE (YYYYMMDD) 2006 / 12 / 04				2. TYPE SURVEY (Enter Code) <div style="border: 1px solid black; display: inline-block; padding: 2px;">2</div> <div style="font-size: small; margin-top: 5px;">1- INITIAL SURVEY 2- RESURVEY 3- OTHER</div>				
3. SOUND LEVEL METER		4. MICROPHONE		5. CALIBRATOR				
a. MANUFACTURER Extech		a. MANUFACTURER		a. MANUFACTURER Extech				
b. MODEL 407703	c. SERIAL NO. 041002810	b. MODEL	c. SERIAL NO.	b. MODEL 7703A	c. SERIAL NO. 4XX69			
d. LAST ELECTROACOUSTIC CALIB DATE YR/ MO/ D 06/03/06		d. LAST ELECTROACOUSTIC CALIB DATE YR/ MO/ D		d. LAST ELECTROACOUSTIC CALIB DATE YR/ MO/ D 06/03/06				
6. WIND SCREEN (X one) USED <input checked="" type="checkbox"/> NOT USED <input type="checkbox"/>				7. MEASUREMENTS OBTAINED (X one) INDOORS <input type="checkbox"/> OUTDOORS <input checked="" type="checkbox"/>				
8. DESCRIPTION OF AREAS/DUTIES WHERE NOISE SURVEY CONDUCTED (Illustrate on additional sheet and attach to form) Tuskegee Armory 1101 Chappie James Avenue Tuskegee, AL 36083					9. PRIMARY SOURCE OF NOISE Generators			
					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)	d. PLUG + MUFF + TIME LIMIT (Greater than 118)
5 kw Generators	S		90.3			X		
HUMMWV	S		87.6			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.) Decals/ Signs were posted in work area and on machinery indicating the need for hearing protection.								
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) All who work in this shop area								
16. SUPERVISOR OF NOISE- HAZARDOUS AREA OR OPERATION								
a. NAME (Last, First, Middle Initial) SGT [REDACTED]			b. TELEPHONE (include area code) 334-727-0900			c. ORGANIZATION Tuskegee Armory		
17. SURVEY PERFORMED BY (Last Name, First Name, MI) <div style="background-color: black; color: red; padding: 2px; display: inline-block;">Non-Responsive</div>					18. HEARING CONSERVATION MONITOR (Last Name, First Name, MI)			

DD FORM 2214, JAN 2000

PREVIOUS EDITION MAY BE USED

Hazardous Material inventory

Isopropyl alcohol
Scouring powder
Glass cleaner
All purpose cleaner
Air freshener

Enclosure No.3

Laboratory Analysis

Enclosure No. 4

Full Time Personnel

SGT [Redacted]
SGT [Redacted]

Enclosure No. 5

Analytical Environmental Services, Inc.

Date: 12/26/2006

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: OSHEA II

Lab Order: 0612A04

Project: Tuskegee

Date Received: 12/13/2006 1:05 PM

Delivery Order:

Matrix: Wipe

PO No:

Laboratory ID	Client Sample ID	Results	Units	Report Limit	DF	Date Collected	Date Analyzed	Analyst
0612A04-001A	81100	15700	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-002A	81101	44500	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-003A	81102	53400	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-004A	81103	32500	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-005A	81104	84400	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-006A	81105	666000	µg. Total	21800	1182	12/6/2006	12/26/2006	JY
0612A04-007A	81106	269000	µg. Total	7420	371	12/6/2006	12/26/2006	JY
0612A04-008A	81107	150000	µg. Total	5400	270	12/6/2006	12/26/2006	JY
0612A04-009A	81108	1980	µg. Total	1000	100	12/6/2006	12/26/2006	JY
0612A04-010A	81109	3370	µg. Total	81	4.05	12/6/2006	12/26/2006	JY
0612A04-011A	811010	9630	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-012A	811011	9340	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-013A	811012	13300	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-014A	811013	9650	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-015A	811014	8490	µg. Total	2000	100	12/6/2006	12/26/2006	JY
0612A04-016A	811015	941	µg. Total	20	1	12/6/2006	12/26/2006	JY
0612A04-017A	811016	999	µg. Total	40	1.99	12/6/2006	12/26/2006	JY
0612A04-018A	811017	11300	µg. Total	337	16.83	12/6/2006	12/26/2006	JY
0612A04-019A	811018	4190	µg. Total	87	4.36	12/6/2006	12/26/2006	JY
0612A04-020A	811019	1720	µg. Total	58	2.91	12/6/2006	12/26/2006	JY
0612A04-021A	811020	2400	µg. Total	71	3.51	12/6/2006	12/26/2006	JY
0612A04-022A	711021	2700	µg. Total	72	3.6	12/6/2006	12/26/2006	JY
0612A04-023A	711022	2180	µg. Total	64	3.2	12/6/2006	12/26/2006	JY
0612A04-024A	711023	1390	µg. Total	49	2.45	12/6/2006	12/26/2006	JY
0612A04-025A	711024	108	µg. Total	20	1	12/6/2006	12/26/2006	JY
0612A04-026A	711025	97	µg. Total	20	1	12/6/2006	12/26/2006	JY
0612A04-027A	711026	219	µg. Total	20	1	12/6/2006	12/26/2006	JY
0612A04-028A	711027	455	µg. Total	20	1	12/6/2006	12/26/2006	JY
0612A04-029A	711028	260	µg. Total	20	1	12/6/2006	12/26/2006	JY
0612A04-030A	711029	133000	µg. Total	4860	243	12/6/2006	12/26/2006	JY
0612A04-031A	711030	645000	µg. Total	22800	1139	12/6/2006	12/26/2006	JY

Qualifiers: BRL - Not Detected at the Reporting Limit

DF - Detection Factor

Results are blank corrected where applicable

Page 1 of 1

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HHIM

Enclosure No. 6

Facility layout

Requested but not supplied

Enclosure No. 7

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

NGB-AVN-SI

August 16, 2004

MEMORANDUM FOR The Alabama Army National Guard, Company A 1-167th (M) Infantry, ATTN: SFC [REDACTED] 6448 Fairfax Bypass, Valley, Alabama, 36854.

SUBJECT: Industrial Hygiene Survey of the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

1. References.

- a. Report submitted 2 August 2004, Industrial Hygiene Survey, Enviro Management Inc.
- b. OSHA Standards 29 CFR (Code of Federal Regulations), General Industry, revised 1988.
- c. AR 40-5, Preventive Medicine, October 1990.
- d. AR 11-34, 15 February 1990, The Army Respiratory Protection Program.
- e. AR 385-10, 23 May 1988, Army Safety Program.
- f. Department of the Army Pamphlet (DA PAM) 40-501, 27 August 1991, Hearing Conservation.
- g. TB MED 530, The Army Industrial Hygiene Program.
- h. Title 29 Code of Federal regulation (CFR), 1989 rev, Part 1910.94 (c) (6) Table G-10, Ventilation.
- i. Industrial Ventilation, 21st ed, 1992, American Conference of Governmental Industrial Hygienist, Cincinnati, Ohio.
- j. IES Lighting Handbook, Application Volume, 1981, Illumination Engineering Society of North America.

2. General.

a. At the request of the Alabama State Safety and Occupational Health Office and the Region South Industrial Hygiene Office a service contract was put together to conduct Health Hazard Information module (HHIM) Field surveys and IH surveys at ten Alabama National Guard Armories.

- b. Mrs. [REDACTED] of Enviro Management Inc conducted the surveys.

3. Findings. All HHIM field survey forms and survey findings of the report are enclosed. (See ENCL. 1)

4. Recommendations.



a. Follow all recommendations made in reference 1. a., requesting industrial hygiene (IH) services where needed to complete the recommendations.

b. Use the report to help in correcting all deficiencies noted by the contractor.

c. Discuss the high lead levels on the bullet backstop and the items stored in the Indoor Firing Range (IFR) with the Safety and Occupational Health Office, the Facility Management Office and the Environmental Office. Do not remove any items stored in the IFR until further sampling is conducted.

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

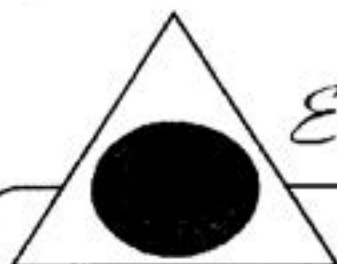
e. To execute your responsibilities in correcting all deficiencies and meeting all standards coordinate with the Occupational Health Nurse and the Occupational Safety and Health Office for technical guidance.

5. If additional information is needed about the contractors report, please contact 
 Regional Industrial Hygienist, ARNG-IHS, 1-800-362-0262 OR
COMMERCIAL (404) 559-4174.

Non-Responsive


Regional Industrial Hygienist

CF: State Safety Office, AL, ATTN: MAJ  Occupational Health
Manager, PO BOX 3711 Montgomery, Alabama 36109-0711



Enviro-Management, Inc.

INDUSTRIAL HYGIENE SERVICE

MEMORANDUM FOR: Company A 1-167th (M) Infantry. Attn: Commander, Ft. Clyde W. Osborne National Guard Armory, 6448 Fairfax Bypass, Valley, Alabama 36854.

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, AL.

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. National Guard Pamphlet (NG PAM) AR 385-16, Safety Guidelines for Converting Indoor Firing Ranges to Other Uses.
- h. National Institute for Occupational Health and Safety (NIOSH), (76-130) Technical Information, Lead Exposure and Design Considerations for Indoor Firing Ranges GPO, 1975.
- i. Industrial ventilation, 22nd Edition, American Conference of Governmental Industrial Hygienist (ACGIH), Cincinnati, Ohio.
- j. 29 CFR 1926.58, The OSHA Asbestos Standard.
- k. Housing and Urban Development (HUD) Guidelines for the Evaluation and Control of Lead Based Paint Hazards in Housing.

2. Purpose. The purpose of this survey was to conduct a baseline Industrial Hygiene Survey of the Ft. Clyde W. Osborne National Guard Armory. The survey consisted of a walk through inspection of all operations and administrative areas in the Ft. Clyde W. Osborne Armory. An interview was conducted with SFC [REDACTED] to gather background and historical information relative to the various operations at the Ft. Clyde W. Osborne Armory. A diagram of the building is found in Appendix A. Photographs of the facility are located in Appendix B. Appendix C contains the health hazard inventory module (HHIM). Appendix D includes an excerpt from NG PAM 385-16, Guidelines for converting indoor firing ranges to other uses. Appendix E includes laboratory results and Appendix F includes a list of all personnel working in the Armory.

3. Background. At the request of Mr. [REDACTED] of the National Guard Bureau Region South Industrial Hygiene Office, an industrial hygiene survey was conducted at the Ft. Clyde W. Osborne National Guard Armory in Valley, Alabama on June 9, 2004 by [REDACTED] Industrial Hygienist.

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

4. Facility Description. This facility houses Company A 1-167th (M) Infantry. Two full time employees work in the Ft. Clyde W. Osborne Armory. The armory is utilized by supply, administrative and training personnel during the week (Monday through Friday) and is utilized for Guard drill on the weekends. The physical structure is a one story brown brick building with dark brown trim. The building was constructed in early 1986. A list of the operations and administrative areas are detailed in Table I.

TABLE I
Operations and Administrative Areas

Admin Offices Supply Room/Vault Communication room Kitchen Class Rooms	Men's Latrine Women's Latrine Inactive firing range
--	---

5. Health Hazard Inventory Module (HHIM) & Risk Assessment Codes - The results of the walk through survey were entered into a health hazard inventory module (HHIM) industrial hygiene form. The form details the hazards found in the particular operation, the controls that are present, and types of personal protective equipment (PPE) used. Health hazard risk assessment codes (RAC's) were assigned to the operations. Risk assessment codes were determined using the RAC table in the Department of Defense (DOD) Instruction 6055.1 and are reproduced in Appendix C.
6. Findings.
- A. Inactive Firing Range/Vehicle Maintenance Facility and Boiler Room - An initial walk through of the facility revealed that there was an inactive firing range located on the premises. A vehicle maintenance operation was not present and an inactive boiler room was not present.
- B. Suspect Asbestos Containing Materials
(1) There were no suspect asbestos containing materials identified in this facility. This is consistent with relatively new construction of the building.

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

- C. Supply Room – The employee temporarily in charge of this operation is SSG [REDACTED]. SSG [REDACTED] works in this area during the week. The employee is responsible for ordering, distributing and storing military supplies and equipment. An ULLS and a RCAS computer system are also utilized in this operation. SSG [REDACTED] uses the computer approximately five hours per day. The employee had no ergonomic concerns or complaints. A flammable cabinet was not present in the supply area. Equipment with a radioactive source is stored in a cabinet under lock and key. The appropriate signage warning of the hazard was present.
- D. Vault – The vault is used to store military weapons. Entry into the vault is limited to SSG [REDACTED] on weekdays and on drill weekends. Weapons repair is not performed inside the vault nor is it meant for continuous occupancy. There is only one means of entry and egress and no independent ventilation is present in the vault.
- E. Illumination survey - An illumination survey was conducted in four areas at this facility. The illumination levels in all areas surveyed were below the American National Standards Institute (ANSI) recommended minimum illumination levels.

The illumination levels in the survey can be seen in table II.

TABLE II
Illumination Survey

Location	Illumination Level (ftc)	ANSI Minimum Requirements (ftc)	DG 412-2 Minimum Requirements (ftc)
SFC [REDACTED] office	31	50 – 100	50
SSC [REDACTED] office	47	50 – 100	50
SFC [REDACTED] computer	30	50-100	50-100
Supply room office	31	10	10

Notes: ANSI office illumination depending on the task is 50 ftc for general desk work and 90 ftc for reading poor quality print.

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

- F. Drill Floor – The drill floor is used on guard weekends by drill personnel. The floor was composed of concrete and the ceiling is composed of 2x4 drop in ceiling tile that is approximately 30-35 feet in height. Interviews revealed that vehicles were occasionally driven onto the drill hall floor and weapons are also cleaned in the area. As required, lead wipe samples were collected from the drill floor and the laboratory results reveal the following: All samples were below the 200 micrograms/sq.ft. guideline as required by NG PAM (AR) 385-16.
- G. Kitchen – The kitchen is adjacent to the drill floor and is fully functional. The kitchen is used during the drill weekend
- H. Inactive Firing Range – The Ft. Osborne Armory is equipped with an inactive indoor firing range that has been left completely in tact. An interview revealed that the firing range has not been cleaned or decommissioned. The area is now used for storage. As required, lead wipe samples were collected from the inactive firing range. Laboratory results revealed that three of the samples taken from the firing range were found to be above 200 micrograms/sq. ft. guidelines as required by NG PAM(AR)385-16.
- I. Flammable Storage Operation – Paint, paint thinner, oils, lubricants, etc. are stored in this operation. This operation is accessed by the supply sergeant on drill weekends. Material safety data sheets (MSDS) and a hazardous materials inventory list (HMIL) were readily available. Personal protective equipment (PPE) was available and a fire extinguisher was also available. A spill kit was not observed for this operation.

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

Recommendations

1. Lighting should be upgraded in all areas where indicated as deficient.
2. A spill kit should be provided for the flammable storage operation.
3. As required by NG PAM (AR) 385-16, the inactive firing range should be decontaminated and clearance testing should be performed to verify the effectiveness of the cleanup.

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

Ft. Osborne National Guard Armory
Lead Wipe Sample Analysis
Appendix E

Sample No.	Location	Type Analysis	Micrograms /cubic ft ug/m3
V-01	Drill Fl., Near overhead door	Lead	26.0
V-02	Drill Fl. Center of Floor	Lead	26.0
V-03	Drill Fl., at storage B	Lead	BRL
V-04	Kitchen, at entrance	Lead	33.0
V-05	SSG [REDACTED] office. Supply grill	Lead	27.0
V-06	Blank	Lead	BRL
V-07	Bullet backstop	Lead	34,600
V-08	Front of bullet backstop	Lead	46,900
V-09	Stored items	Lead	582
V-10	Rear wall @ entr./exit	Lead	96.0
V-11	Blank	Lead	BRL

APPENDIX A

APPENDIX B





APPENDIX C

07C 00 04 06 09 NG

SA SAH

Supervisor ☒ Mr. ☐ Ms.

Supervisor or Point of Contact Telephone Number 334 756 3464

Lab Hoods ☒ Vapor Degreasers ☒ Spray Booths ☒ Open Surface Tanks ☒ Commercial ☒

Controls present (if > 6, continue in comments) [25] Evaluation [25 char max per line]

Lights

Supply office (complex)

Unit Code 29.6-31 F TC

Controls Required [25 char max per line] 50-100

Unit/Organization 6448 Fairfax

RAC 4

Frequency (hrs/day) 4

No. CIVS

No. MIL

Contractors

No. LOCs

Room Number 36854

Building Number FT. C.W. Osborne

Sub-MACOM

RAC

Unit/Organization

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Manufacturer's Description [10 char max] NIOSH TC# or foreign equiv. [10 char max]

Respirator

Gloves

Head and Feet

Body

Hearing

Face

Other

Head and Feet

Body

Hearing

Face

Other

Head and Feet

Body

Hearing

Face

Other

Head and Feet

Body

Hearing

Face

Other

Head and Feet

Body

Hearing

Face

Other

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

Reminders: ergonomics - dermalitis - physical agents - flammable storage
EYE (permanent) - EYE (portable) - SIGW - GNV - LEV

MEDDAC FORM 609-R

01c 20
 Location: A A
 Survey Date: 04/06/09
 Year: 04
 Month: 06
 Day: 09
 Building Number: FTJ
 Sub-MACOM: XX
 MACOM: NG
 RAC: 5
 Unit/Organization: 6448 Fairfax
 BVPAS
 VAILEY AL-36854

Supervisor: Mr. ☒ ☐
 Supervisor or Point of Contact Telephone Number: 334 7516
 DSN: 3464
 Commercial: ☒
 Lab Hoods: ☒
 Vapor Degreasers: ☒
 Open Surface Tanks: ☒
 Ventilation Units: ☒
 Frequency (hrs/day): ☐
 No. CIVs: ☐
 No. MIL: ☒
 Contractors: ☒
 No. LOCs: ☒

Controls present (if >6, continue in comments) [25 char max per line]
 Evaluation [25 char max per line]
 Unit Code: _____
 Controls Required [25 char max per line]
 Manufacturer's Description [10 char max] NIOSH TC# or foreign equiv. [10 char max]

Eyes and Face
 chemical splash
 full face shield
 chem/safety impact
 safety impact
 welding helmet
 sunglasses
 welding goggles/glasses
 laser eye protection
 other

Hearing
 (>95-100dBA steady)
 earplugs
 helmets with muffs
 muffs alone
 muffs and earplugs
 (108-116)
 muffs and earplugs
 (116 or >) with line fit
 other
 other

Body
 aprons
 cold weather clothing
 coveralls
 full body suit
 heat reflective vest/suit
 safety belt/arness
 special purpose clothing
 other
 other

Head and Feet
 cold weather footgear
 hard hats
 impermeable boots
 safety shoes (conductive)
 safety shoes (nonconductive)
 other
 other
 other
 other

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

Hazard Description

100

Last Name

First Name _____

Category

Remember to comment on problems, recommendations, and needed control items

2. other operations: OFF, MAN

BEST AVAILABLE COPY

MEDDAC (P1 HEADLINE)
FORM 609-R
1 MAY 85

MEDDAC IF P LEADS FORM 609-R
1 MAR 1995

Hazard Description

[illegible]

Last Name

[illegible]

First Name

A blank grid for drawing a picture, consisting of 10 columns and 15 rows of squares. A solid black rectangular box is positioned in the top right corner, partially overlapping the grid.

Category

Personnel data provided by the facility is attached to this form

Remember to comment on problems, recommendations, and needed control items

7. Operation described is: ADC

2. Other operations: Off, May

BEST AVAILABLE COPY

MEDDAC (P.T. MEDAC) **FORM 609-R**
1 MAY 95

7000 ETC

CLASS

PAC EPC

Initial Description

Petroleum distillates
Petroleum spirits/mineral sps / imp impurities

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
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Social Security Number or Other Unique Identifier

Last Name

First Name

MI Sex Category

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----

BEST AVAILABLE COPY

Personnel data provided by the facility is attached to this form

Comments

Remember to comment on problems, recommendations and needed control items

1. Detail as described is DHP. Storage and dispersing oils and lubricants
2. PPE, spill kit, and fire extinguisher was available.
3. There was no lighting in this operation.
4. A HML and MSDS book was available.
5. Necessary warning signage available

FOIA Requested Record #3-15-0835 (AL)
Released by National Guard Bureau
Page 749 of 759

1. Goals:

1. The first row of the table is the header row, which contains the following information:

Year	Country	Population (millions)	Urban population (millions)	Urban population (%)
------	---------	-----------------------	-----------------------------	----------------------

2. The second row of the table is the first data row, which contains the following information:

1990	China	1,192	311	26.1
------	-------	-------	-----	------

3. The third row of the table is the second data row, which contains the following information:

1990	India	854	151	17.7
------	-------	-----	-----	------

4. The fourth row of the table is the third data row, which contains the following information:

1990	United States	248	181	72.9
------	---------------	-----	-----	------

5. The fifth row of the table is the fourth data row, which contains the following information:

1990	Japan	123	101	82.1
------	-------	-----	-----	------

6. The sixth row of the table is the fifth data row, which contains the following information:

1990	Germany	61	51	83.6
------	---------	----	----	------

7. The seventh row of the table is the sixth data row, which contains the following information:

1990	France	59	48	81.4
------	--------	----	----	------

8. The eighth row of the table is the seventh data row, which contains the following information:

1990	United Kingdom	56	46	82.1
------	----------------	----	----	------

9. The ninth row of the table is the eighth data row, which contains the following information:

1990	Italy	56	46	82.1
------	-------	----	----	------

10. The tenth row of the table is the ninth data row, which contains the following information:

1990	Canada	31	24	77.4
------	--------	----	----	------

11. The eleventh row of the table is the tenth data row, which contains the following information:

1990	South Africa	26	18	69.2
------	--------------	----	----	------

12. The twelfth row of the table is the eleventh data row, which contains the following information:

1990	Australia	18	14	77.8
------	-----------	----	----	------

13. The thirteenth row of the table is the twelfth data row, which contains the following information:

1990	Sweden	8	7	87.5
------	--------	---	---	------

14. The fourteenth row of the table is the thirteenth data row, which contains the following information:

1990	Norway	4	3	75.0
------	--------	---	---	------

15. The fifteenth row of the table is the fourteenth data row, which contains the following information:

1990	Denmark	5	4	80.0
------	---------	---	---	------

16. The sixteenth row of the table is the fifteenth data row, which contains the following information:

1990	Netherlands	16	14	87.5
------	-------------	----	----	------

17. The seventeenth row of the table is the sixteenth data row, which contains the following information:

1990	Belgium	10	9	90.0
------	---------	----	---	------

18. The eighteenth row of the table is the seventeenth data row, which contains the following information:

1990	Switzerland	7	6	85.7
------	-------------	---	---	------

19. The nineteenth row of the table is the eighteenth data row, which contains the following information:

1990	Austria	8	7	87.5
------	---------	---	---	------

20. The twentieth row of the table is the nineteenth data row, which contains the following information:

1990	Finland	5	4	80.0
------	---------	---	---	------

21. The twenty-first row of the table is the twentieth data row, which contains the following information:

1990	Ireland	3	2	66.7
------	---------	---	---	------

22. The twenty-second row of the table is the twenty-first data row, which contains the following information:

1990	Portugal	10	7	70.0
------	----------	----	---	------

23. The twenty-third row of the table is the twenty-second data row, which contains the following information:

1990	Greece	10	7	70.0
------	--------	----	---	------

24. The twenty-fourth row of the table is the twenty-third data row, which contains the following information:

1990	Spain	39	24	61.5
------	-------	----	----	------

25. The twenty-fifth row of the table is the twenty-fourth data row, which contains the following information:

1990	Poland	35	24	68.6
------	--------	----	----	------

26. The twenty-sixth row of the table is the twenty-fifth data row, which contains the following information:

1990	Czech Republic	10	7	70.0
------	----------------	----	---	------

27. The twenty-seventh row of the table is the twenty-sixth data row, which contains the following information:

1990	Slovak Republic	5	3	60.0
------	-----------------	---	---	------

28. The twenty-eighth row of the table is the twenty-seventh data row, which contains the following information:

1990	Hungary	10	7	70.0
------	---------	----	---	------

29. The twenty-ninth row of the table is the twenty-eighth data row, which contains the following information:

1990	Czechoslovakia	10	7	70.0
------	----------------	----	---	------

30. The thirtieth row of the table is the twenty-ninth data row, which contains the following information:

1990	Yugoslavia	23	14	60.9
------	------------	----	----	------

31. The thirty-first row of the table is the thirtieth data row, which contains the following information:

1990	Bulgaria	8	5	62.5
------	----------	---	---	------

32. The thirty-second row of the table is the thirty-first data row, which contains the following information:

1990	Romania	22	14	63.6
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33. The thirty-third row of the table is the thirty-second data row, which contains the following information:

1990	USSR	285	141	49.5
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34. The thirty-fourth row of the table is the thirty-third data row, which contains the following information:

1990	China	1,192	311	26.1
------	-------	-------	-----	------

35. The thirty-fifth row of the table is the thirty-fourth data row, which contains the following information:

1990	India	854	151	17.7
------	-------	-----	-----	------

36. The thirty-sixth row of the table is the thirty-fifth data row, which contains the following information:

1990	United States	248	181	72.9
------	---------------	-----	-----	------

37. The thirty-seventh row of the table is the thirty-sixth data row, which contains the following information:

1990	Japan	123	101	82.1
------	-------	-----	-----	------

38. The thirty-eighth row of the table is the thirty-seventh data row, which contains the following information:

1990	Germany	61	51	83.6
------	---------	----	----	------

39. The thirty-ninth row of the table is the thirty-eighth data row, which contains the following information:

1990	France	59	48	81.4
------	--------	----	----	------

40. The fortieth row of the table is the thirty-ninth data row, which contains the following information:

1990	United Kingdom	56	46	82.1
------	----------------	----	----	------

41. The forty-first row of the table is the fortieth data row, which contains the following information:

1990	Italy	56	46	82.1
------	-------	----	----	------

42. The forty-second row of the table is the forty-first data row, which contains the following information:

1990	Canada	31	24	77.4
------	--------	----	----	------

43. The forty-third row of the table is the forty-second data row, which contains the following information:

1990	South Africa	26	18	69.2
------	--------------	----	----	------

44. The forty-fourth row of the table is the forty-third data row, which contains the following information:

1990	Australia	18	14	77.8
------	-----------	----	----	------

45. The forty-fifth row of the table is the forty-fourth data row, which contains the following information:

1990	Sweden	8	7	87.5
------	--------	---	---	------

46. The forty-sixth row of the table is the forty-fifth data row, which contains the following information:

1990	Norway	4	3	75.0
------	--------	---	---	------

47. The forty-seventh row of the table is the forty-sixth data row, which contains the following information:

1990	Denmark	5	4	80.0
------	---------	---	---	------

48. The forty-eighth row of the table is the forty-seventh data row, which contains the following information:

1990	Netherlands	16	14	87.5
------	-------------	----	----	------

49. The forty-ninth row of the table is the forty-eighth data row, which contains the following information:

1990	Belgium	10	9	90.0
------	---------	----	---	------

50. The fiftieth row of the table is the forty-ninth data row, which contains the following information:

1990	Switzerland	7	6	85.7
------	-------------	---	---	------

51. The fifty-first row of the table is the fiftieth data row, which contains the following information:

1990	Austria	8	7	87.
------	---------	---	---	-----

Social Security Number
Other Contact Identifier

1.5. Planning

First Name

5121

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BEST AVAILABLE COPY

The invoice data provided by the supplier is attached to this letter.

[illegible]

Introduction

Relevance: Scoring tool for physicians, the City's interventions, and health-related quality of life.

2. Operation description: IFR

2- Other operations: SAH, MVA, LCA

3. head wipe results revealed that the sample was a chive dog
- missing canine paracanine fold.

FOIA Requested Record # 15-0885 (AL)
Released by National Guard Bureau

Abstract Description:

Falsi et al.

Category	Yes	No	NA	Don't know	Total
1. How often do you use the Internet?					
2. How often do you use e-mail?					
3. How often do you use a computer?					
4. How often do you use a mobile phone?					
5. How often do you use a television?					
6. How often do you use a radio?					
7. How often do you use a newspaper?					
8. How often do you use a magazine?					
9. How often do you use a book?					
10. How often do you use a video?					
11. How often do you use a CD/DVD?					
12. How often do you use a DVD player?					
13. How often do you use a VCR?					
14. How often do you use a stereo system?					
15. How often do you use a car stereo?					
16. How often do you use a mobile phone?					
17. How often do you use a mobile phone?					
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81. How often do you use a mobile phone?					
82. How often do you use a mobile phone?					
83. How often do you use a mobile phone?					

Further detail data provided by the factory is attached to this form

How much is known about the problems, perceptions, and needs of children?

2. other operations: LOA, MAN

3. Vehicles are driven onto the floor and weepers are also cleaned on the drill floor

4. Lead pipe samples were taken on the drill floor and the results revealed all samples were below 300 micrograms per square foot.

APPENDIX D

HEADQUARTERS
DEPARTMENTS OF THE ARMY AND THE AIR FORCE
Washington, DC 20310-2600
31 January 1994

NG PAM (AR) 385-16
ANGPAM 91-101

Safety

GUIDELINES FOR CONVERTING INDOOR FIRING RANGES TO OTHER USES

Summary. This is a new pamphlet. The guidance prescribes policy, responsibilities, and procedures on how to convert lead-contaminated indoor firing ranges to other uses.

Applicability. This guidance applies to all persons responsible for the operation of Army National Guard (ARNG) and Air National Guard (ANG) indoor firing ranges. As no regulations/guidance can foresee all situations that might arise, the following is written in a broad scope and is intended to be interpreted as to the INTENT of the law by health professionals.

Supplementation. Supplementation of this guidance is prohibited without prior approval from Chief, National Guard Bureau (NGB-AVN-SI).

Impact on New Manning System. This guidance does not contain information that affects the New Manning System.

Interim changes. Interim changes are not official unless they are authenticated by the Chief, Administrative Services. Users will destroy interim changes on their expiration date unless sooner superseded or rescinded.

Suggested Improvements. The proponent of this publication is the National Guard Bureau. Users are invited to send comments and suggested improvements on DA Form 2026 (Recommended Changes to Publications and Blank Forms) directly to Chief, National Guard Bureau, Attn: NGB-AVN-SI, 111 South George Mason Drive, Arlington, VA 22204-1352.

Distribution. Distribution of this publication is made in accordance with the requirements on DA Form 12-09-E.

CONTENTS (Listed by paragraph numbers)

	Para
Purpose	1
References	2
Explanation of abbreviations and terms	3
Policy and procedures	4
Goal	5
Background	6
Wipe Sample Media	7
Wipe Sampling Protocol	8
Range Cleaning Instructions	9
Cleaning Stored Contaminated Equipment	10
Contaminated Sand and Lead Waste	11
Medical Surveillance	12
Worker Education	13
Personal Protective Equipment	14
Point of Contact	15

Appendices

- A. Sampling Strategy for Collection of Wipe Samples
- B. Interpretation of Sample Results (Prior to Cleaning)
- C. Interpretation of Sample Results (After Cleaning)
- D. OSHA Instruction CPL 3-2.208
- E. Where to Purchase Sample Media and Containers
- F. AEHA Form 8-R (Bulk Sample Data)
- G. Instructions to Complete AEHA Form 8-R
- H. Examples of Computation of Lead Level from Wipe Sample Results
- I. Supporting Laboratories and Areas Served

Glossary

- 1. Purpose**
This pamphlet establishes policy and procedures for converting indoor firing ranges to other uses.
- 2. References**
Related publications are listed below.
 - a. DOD 8953.7 (Department of Defense Occupational Safety and Health (OSH) Program).
 - b. AR 17-34 (The Army Respiratory Protection Program).
 - c. AR 40-3 (Preventive Medicine).
 - d. NGR (AR) 385-15 (Policy, Responsibilities, and Procedures for Inspection/Evaluation and Use of ARNG Indoor Firing Ranges).
 - e. TB MED 502 (Occupational and Environmental Health Respiratory Protection Program).
 - f. USAEHA IG 141 (Industrial Hygiene Air Sampling and Bulk Sampling Instructions).
 - g. Title 29, Code of Federal Regulations (CFR) revision, Part 1910 (Occupational Safety and Health Standards).

27 January 1984

HQ Part (AR) 385.16-ANGPAM 31-101

APPENDIX B INTERPRETATION OF SAMPLE RESULTS (PRIOR TO CLEANING)

B-1 200 micrograms/mq ft or LESS

If all sample results are 200 micrograms/mq ft or less, the range can be converted and/or used for any purpose.

B-2 BETWEEN 201 and 200,000 micrograms/mq ft

Range must be unconverted. Continue with cleaning instructions listed in paragraph 15. Sample results will be used to establish a baseline. The baseline sample results will be used to ensure the 75 percent reduction is achieved.

B-3 OVER 200,000 micrograms/mq ft

Your sample media may not be capable of collecting additional lead dust and results that are above 200,000 micrograms/mq ft should be considered suspect. Larger concentrations of lead dust may exist on surfaces tested other than results indicate. If the initial sampling results are above 200,000 micrograms/mq ft, the range should be cleaned by either HEPA vacuuming and/or wet wiping to establish a baseline. After the cleaning procedure is completed, resampling should occur until sample results are under the 200,000 micrograms/mq ft limit.

B-4 High sample results may exist due to personnel walking or moving equipment/vehicles over the range surfaces causing the lead dust to be "ground" into the substratum. For example, a maintenance activity may have oversprayed paint or spilled solvents onto the surface which would bond with the lead dust. Consult your Regional Industrial Hygiene Office for specific guidance.

below the 75 percent reduction, a more thorough cleaning of the range is required along with resampling until criteria are met.

* PLEASE NOTE, that if your original wet sample results were, i.e., 175,000 ug/mq ft then you would have to reduce the test level below 13,125 ug/mq ft. This would meet the 75 percent reduction criteria. However, this is an enormous amount of lead dust and care should be taken to ensure a heavy coat of paint seals the lead dust. It is unknown at this time whether or not the remaining amount of lead dust will show the latex paint to adhere to the substratum. If the paint peels, falls to the floor and is crushed over a piece of glass, it will create another respirable lead hazard. If this happens, contact your Regional Industrial Hygiene Office for guidance. Periodically monitor the converted range for signs of peeling paint. Paint chips can be analyzed for lead content. **DO NOT IGNORE PEELING PAINT IN A CONVERTED INDOOR FIRING RANGE.**

APPENDIX C INTERPRETATION OF SAMPLE RESULTS (AFTER CLEANING)

C-1 200 micrograms/mq ft or LESS

If all sample results are less than 200 micrograms/mq ft, the range can be converted and/or used for any purpose after a coat of lead-free latex paint is applied. The paint color must contrast the color of the present substratum.

C-2 ABOVE 200 micrograms/mq ft

As a minimum, a 75 percent reduction should occur from your initial sample results or the samples should be under the 200 micrograms/mq ft level. If all sample results meet this criteria, a contrasting color of lead-free latex paint must be applied before the area is utilized for other purposes. The room can only be used as a storage area. Storage of kitchen equipment and food is prohibited. The room cannot be used for a child care or nursery area. If sample results are not

APPENDIX E

Analytical Environmental Services, Inc.

Date: 7/26/2004

TOTAL LEAD IN WIPE SAMPLES
N7082

CLIENT: National Guard Bureau Region-South IH
 Project: Lead Analysis
 Delivery Order:
 PO No:

Lab Order: 0407411
 Date Received: 7/12/2004 10:25
 Matrix: Wipe

Laboratory ID	Client Sample ID	Result	Units	Report Limit	DT	Date Collected	Date Analyzed	Analyst
0407411-009A	Valley V-01	260	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-010A	Valley V-02	250	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-011A	Valley V-03	BRL	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-012A	Valley V-04	330	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-013A	Valley V-05	220	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-014A	Valley V-06	BRL	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-015A	Valley V-07	34600	µg/m²	200	19.41	6/30/2004	7/14/2004	EM
0407411-016A	Valley V-08	40000	µg/m²	2000	100	6/30/2004	7/14/2004	EM
0407411-017A	Valley V-09	582	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-018A	Valley V-10	960	µg/m²	200	1	6/30/2004	7/14/2004	EM
0407411-019A	Valley V-11	BRL	µg/m²	200	1	6/30/2004	7/14/2004	EM

Qualifiers: ND - Not Detected at the Reporting Limit

DT - Diluted Factor

APPENDIX F

SUBJECT: Industrial Hygiene Survey for the Ft. Clyde W. Osborne National Guard Armory, Valley, Alabama.

Ft. Clyde w. Osborne

1. **Non-Responsive** SSG
2. **[REDACTED]** SFC