

Industrial Hygiene Report
For
Georgia National Guard
HHC 1st BN 121ST IN
95 Maynard St.
Winder, Georgia 30680



Prepared for:
National Guard Bureau
Regional Industrial Hygiene Office
Region South
510 Plaza Drive, Suite 1530
College Park, Georgia 30349



**NATIONAL GUARD BUREAU
REGIONAL INDUSTRIAL HYGIENE OFFICE
AIRPORT PLAZA SUITE 1530
510 PLAZA DRIVE COLLEGE PARK, GA 30349**

ARNG-CSG-P

February 20, 2012

MEMORANDUM FOR: Georgia Army National Guard, ATTN: MAJ (b) (6), 95
Maynard St. Winder, GA 30680.

SUBJECT: HHC Company 1st BN 121ST IN and Downtown (Temporary) FMS Shop
National Guard Armory February 17, 2012.

1. References.

- a) NG PAM 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges, 3 November 2006.
- b) Department of Defense Instruction 6055.1, Department of Defense Occupational Safety and Health (OSH) Program, 26 October 1984.
- c) EPA, Guidance for Controlling Asbestos Containing Materials in Buildings, June 1985.
- d) MEMORANDUM SGPS-PSP, OTSG, subject: AMEDD Role Supporting Asbestos Abatement/ Asbestos Management Programs, 19 January 1989.
- e) TB MED 513, Guidelines for the Evaluation and Control of Asbestos Exposure, 15 December 1986. [10/2007 Under Revision as DA PAM 40-513]
- f) Army Regulation (AR) 40-5, Medical Service, Preventive Medicine, 22 July 2005.
- g) National Guard Regulation (NGR) 385-10, Army National Guard Safety and Occupational Health Program, 1988.
- h) DA PAM 40-503, The Army Industrial Hygiene Program, 30 October 2000.
- i) Title 29, Code of Federal Regulations (CFR), 2001 rev., part 1910, Occupational Safety and Health Standards.

2. General.

- a) An Industrial Hygiene survey was conducted at HHC Company 1st BN 121ST IN National Guard Armory February 17, 2012. The purpose of this visit was to conduct a formal walk through while identifying hazards and making recommendations regarding those hazards. During the survey lead wipe test,

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- h) Pipe insulation is damaged.
- i) Chemicals in flammable cabinet were not organized properly.
- j) Safety signs were seen in the area.

5. Lead

- a) Laboratory findings show that there is lead present in the samples taken from the Indoor Firing Range and also in the mortar bay area.
- b) The amount of lead found in these areas is significantly higher than the reporting limit.

The results are illustrated in the chart below.

Sample Number	Sample Location	Laboratory Results
MN080 HHC- 121	Supply Vault Wall B	Not Detected
MN081 HHC- 121	Supply Vault Wall C	Not Detected
MN083 HHC- 121	Range Room Wall	Not Detected
MN084 HHC- 121	Indoor Firing Range Floor	12,200ug
MN085 HHC- 121	Indoor Firing Range Wall A	225ug
MN087 HHC- 121	Scout Bay Floor	Not Detected
MN088 HHC- 121	Mortar Bay Floor	43ug

6. Asbestos

- a) Laboratory findings show that there were no asbestos in the pipe insulation or range room samples.

The results are illustrated in the chart below.

Sample Number	Sample Location	Laboratory Results
MN082 HHC- 121	Range Room Wall C	Not Detected
MN086 HHC- 121	Drill Hall Pipe Insulation	Not Detected

7. Illumination

Location	Number of Fixtures/ Lights per Fixture	Number of burned out tubes	Illumination Foot Candles (FC)
Boiler Room	6 Fixture, 1 each		10.6-31.6

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BN XO	6 Fixture, 2 each	1 Fixture out	10.4-52.2
CSM Office	2 Fixtures, 3 each		44.7-94.1
R&R NCOIC	2 Fixtures, 3 each		52.6-104.5
S1 Officer	2 Fixtures, 3 each	2 Bulbs out	
BN Pac	7 Fixtures, 3 each	4 Bulbs out	29.5-68.5
Workout Area	16 Fixture, 1 each		13.5-18.1
Utility (mop) Room	4 Fixture, 2 each		23.6-32.2
BN CMD	4 Fixture, 3 each		49.3-68.3
Distribution Room	2 Fixture, 2 each		7.4-20.8
Conference Room	6 Fixture, 3 each	2 Bulbs out	27.6-50.4
Echo Supply Room	16 Fixture, 1 each		3.9-12.9
Echo Supply Office	2 Fixture, 3 each	1 Fixture out	36.5-50.8
Vault	2 Fixture, 1 each		12.9-24.3
Scout Bay	4 Fixture, 1 each		7.9-11.5
Kitchen	6 Fixture, 3 each		111.3-154.2
Latrine	7 Fixture, 2 each		6.6-42.6
Drill Hall	28 Fixture, 1 each	4 Fixtures out	.9-4.5
Mortar Bay	2 Fixture, 2 each		24.3-40.6
GSDf	4 Fixture, 3 each		17.8-108.9
MEDIC	4 Fixture, 3 each		55.5-114.6
RSP	4 Fixture, 3 each	4 Bulbs out	24.9-52.5
HHC Supply Room	24 Fixture, 1 each	1 Bulbs out	4.0-22.1
BN OPS NCOIC	2 Fixture, 2 each		19.2-35.7

According to the IES Lighting Handbook, Volume 1995, working spaces where visual tasks are conducted should have a range of illumination between 20- 50 FC. Illumination in areas where visits are temporary should range from 5- 10 FC.

8. Discussions.

Main Building

- a) Efflorescence was seen in numerous amounts in the Indoor Firing Range in the basement. Efflorescence occurs when water soluble salt minerals seep from cement. Water moving through the material to carry the salts to the surface. The water evaporates and leaves the white powder behind.
- b) Due to the leaks in the building mold is apparent on the walls in the facility. Until the roof is repaired mold will continue to reappear on the walls. Also the holes in the roof are contributing to the damages to the ceiling tile.
- c) Sewage backed up into the latrines. While surveying the area workers were diligently trying to fix the issue.
- d) Mold was found on the air conditioning units that were checked. Soldiers stated mold is growing in all air conditioning units.
- e) Rooms that are normally used as storage are being used to house various soldier activities. These rooms do not have ventilation.

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- f) The boiler room has rusty pipes, due to the high humidity in the room. The pipeline insulation throughout the facility has obvious water damage.
- g) Soldiers stated the water fountain leaked when plugged in because of this it is not currently in use.
- h) Light fixtures should be fixed and bulbs replaced to illuminate the facility better. Continue with the plan to fix lights in the drill hall when scissor lift arrives.
- i) Material Safety Data Sheets (MSDS) were in binders with chemical inventory list. MSDS should be located near hazardous material.

FMS Building Temporary Building

- a) Mold was found in the latrine.
- b) Mold growing on the walls because of water damage.
- c) Ceiling tiles has apparent water damage.
- d) Water was not readily available throughout the FMS facility other than the latrine.
- e) Exhaust fan need to be clean.
- f) Exposed pipes were found in the facility.
- g) Eyewash stations need to be replaced. Shower station was not present.
- h) One fire extinguisher was present but had not been checked since 2008.
- i) Flammable cabinets were not organize and did not have appropriate labeling to inform other what it is housing.
- j) Safety signs were seen posted on the wall in the facility.

9. Recommendations.

Main Building

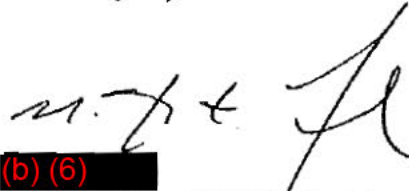
- a) Repair all leaks in the roof and replace all ceiling tiles that have obvious watermarks. Replace all missing ceiling tiles.
- b) Place a sign on the outside of the Indoor Firing Range door indicating the presence of lead. Do not take anything out or into the range. All items inside must be either cleaned of lead or disposed according NG PAM 420-15, before removal.**
- c) Mold in the air conditioning units and on the walls should be removed IAW TG 277 & TG 278.**
- d) Replace all pipeline insulation that has water damage and those exposing pipe.
- e) Storage Rooms that do not have ventilation are being used to house various soldier activities. Find other rooms for these soldiers to work in.
- f) Replace all burned out and missing light fixtures and covers.
- g) Make duplicate MSDS binders and place in areas hazardous chemicals are stored.

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FMS Building Temporary Building

- a) Remove mold in building IAW TG 277 & TG 278.
- b) Repair leaks in the roof and then replace all water stained ceiling tiles.
- c) Clean all exhaust fans in building.
- d) Insulate all exposed pipes in building.
- e) Eyewash station should be replaced with a more efficient station. Also a shower station should be present in the facility.
- f) There should be multiple fire extinguishers in the facility and they should be inspected regularly.
- g) Flammable cabinets should be organized and signs and labels should be posted.

10. If additional information is needed in regards to the above report, please contact SSG (b) (6), Industrial Hygiene Technician, at (404) 242-3418 or (b) (6), Regional Industrial Hygienist, NGB-CSG-P, COMMERCIAL (404) 559-4174.


(b) (6)
Regional Industrial Hygienist

CF: State Safety Office, GA, ATTN: LTC (b) (6), Safety and Occupational Health Manager, 1388 1st Street, Building 840, Dobbins ARB, GA 30069.

Georgia Department of Defense, ATTN: MAJ. (b) (6), State Construction and Facility Manager, Building 70, 1000 Halsey Ave, Marietta, GA 30062.

ISG (b) (6), Shop Supervisor, Downtown (Temporary) Field Maintenance Shop, 95 Maynard St. Winder, GA 30680.

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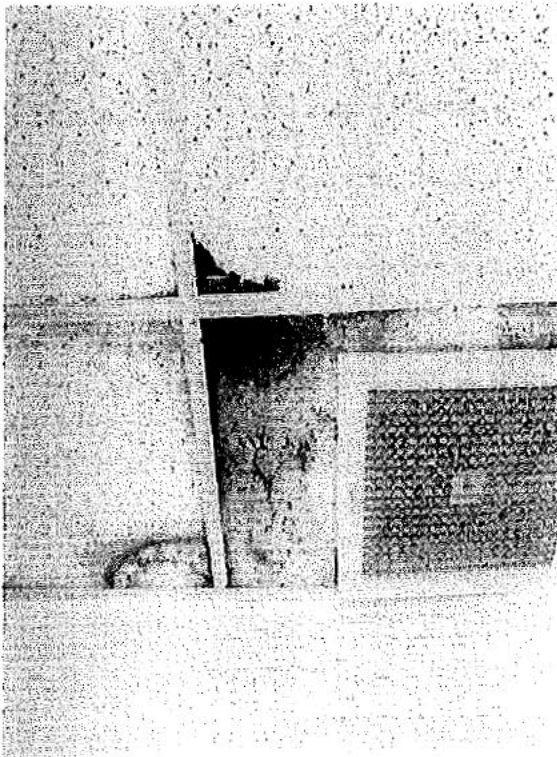
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FMS Building



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ANALYTICAL ENVIRONMENTAL SERVICES, INC.

Bulk Sample Summary Report

NV(LAQ)

Lab ID# 102082-0

24-Feb-12

Client Name: National Guard Bureau Region-South IH

AES Job Number: 1202G66

Project Name: HHC - 1-121

Project Number: HHC

Client ID	AES ID	Location	Asbestos Mineral Percentage						Comments
			CH	AM	CR	AN	TR	AC	
MN 082 HHC 1-121 Layer: 1	1202G66-001A		ND	ND	ND	ND	ND	ND	Paint included as binder
MN 086 HHC 1-121 Layer: 1	1202G66-002A		ND	ND	ND	ND	ND	ND	Paint included as binder

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:

Svetlana Arkhipov

QC Analyst:

Yelena Khanina

Analytical Environmental Services, Inc

Date: 24-Feb-12

Lab Order: 1202G75
 Client: National Guard Bureau Region-South IH
 Project: HHC 1-121
 Matrix: Wipe
 Date Received: 2/20/2012 10:10:00 AM

LEAD ON WIPES (N9100/7082)

N7082

Laboratory ID	Client Sample ID	Result	Units	Reporting Limit	DF	Qual	Date Collected	Date Analyzed	Analyst
1202G75-001A	MN 080 HHC 1-121	BRL	ug, Total	20	1		02/16/2012	02/22/2012	BB
1202G75-002A	MN 081 HHC 1-121	BRL	ug, Total	20	1		02/16/2012	02/22/2012	BB
1202G75-003A	MN 083 HHC 1-121	BRL	ug, Total	20	1		02/16/2012	02/22/2012	BB
1202G75-004A	MN 084 HHC 1-121	12200	ug, Total	369	18.44		02/16/2012	02/22/2012	BB
1202G75-005A	MN 085 HHC 1-121	225	ug, Total	20	1		02/16/2012	02/22/2012	BB
1202G75-006A	MN 087 HHC 1-121	BRL	ug, Total	20	1		02/16/2012	02/22/2012	BB
1202G75-007A	MN 088 HHC 1-121	43	ug, Total	20	1		02/16/2012	02/22/2012	BB
1202G75-008A	MN 089 HHC 1-121	BRL	ug, Total	20	1		02/16/2012	02/22/2012	BB

Qualifiers BRL - Not Detected at the Reporting Limit
 B - Analyte detected in the associated Method Blank

DF - Dilution Factor

Results are blank corrected where applicable