Name:

Date: 9/24/12

NES Job Number: 013.1/11374.60

UB

Light Survey

Building	Location	Light - ft/c
Armony	office @ Desk	53.5
	Office general Area	54.7
	Hallway	37.7
	Drill Floor (N)	30.2
	Prill Floor (S)	31.6
	Orill Flow (E)	32.7
	Drill Floor (W)	33.4
	Starage	24.9
	Colly	2.7.7

Montana ARNG Hazardous Materials Inventory Database: Print Inventory

Page 1 of 1

Print Inventory

Print Inventory Cancel

-94 -940

Unit: Kalispell AFRC

Storage: POL Room - FL 01

Month: 1/1/2011

SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
A01	Spray Paint Gloss White	8010-00-290-6983	LHB So-Sure	BDVHM	4	can	12	V2
A02	Spray Paint Gloss Beige	8010-01-350-5252	LHB So-Sure	вүүрн	0	can	12	
A03	Spray Paint Mask Out	6850-00-N01-9403	Uline	BLHMJ	3	can	12	F3
	SPRAY ADHESIVE	8040-00-171-1535	STAG ENTERPRISE	BTSDC	4	CN	12	V 3
A05	Deep Gloss		Johnson Diversey	114450001	1	CN		
A06	ECO SURE GLOSS BLACK PAINT	8010-01-331-6107	SKILCRAFT	BPPHT	1	CN		V3
Desc	ription: GLOSS BLACK SPRAY	PAINT WHIT LABEL			8			
	Adhesive Tent Patch	8040-00-264-3848	TACC International	ВКСНР	3	can	12	F3
	Lube Oli Shredder	o	Fellows Mfg Corp		2	bottle		
803	LSA •	9150-00-687-4241	Castrol North America	BFLRX	3	qt	24	V6
804	Paint, Oil Based, Gold		Rust-Oleum		3	1/2 pt		
	So Sure Black Paint	8010-00-616-9143 nbow Can Label	Skillcraft	BFJBJ	2	CN	12	F2
	SO SURE TAN PAINT ription: TAN SPRAY PAINT RA	8010-00-348-7713	SKILCRAFT		Q	CN	12	F2
	Horizon Glass Cleaner	7930-00-F03-8660	CC Johnson Way	BWVMH		GL	24	

ttp://ngrptored to NGB FOIA Reading Room / hmi/HMI/printInventory.asp?site=HMI&main=14&sub=8, 4/12/201 FOIA Requested Record #J-15-0085 (MT) May, 2018 Released by National Guard Bureau Page 1323 of 1990



Certificate of Calibration

6209119 Certificate Page 1 of 1

Instrument Identification

Company ID: 607229 INDUSTRIAL HYGIENE SW

Remarks:

10510 SUPERFORTRESS AVE SUITE MATHER, CA 95655

Instrument ID: H225438 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 00279029

PO Number

Certificate Information

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE Procedure: MINOLTA T-1M ILLUMINANCE METER Technician: Non-Responsive

Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C Humidity: 43.0 %

Tektronix Service Solutions certifies the performance of this instrument has been verified using equipment of known accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the International System of Units (SI), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL 2540.1-1994. The quality system is registered to

ISO9001. This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

> Approved By: Non-Responsiv Service Representative

Calibration Standards

NIST Traceable#	Inst. ID#	Description		Manufacturer	Model	Cal Date	Date Due
1700230826	17-1001076	6 STEEL RULE		STARETT	C416R-72	10Jun2010	10Jun2012
1700278206	17-2007214	1000W LIGHT BULB	390	OPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
1700201473	4083RC	MULTIMETER		FLUKE	8842A	25Jul2011	25Jul2012
1700201472	461952	CURRENT SHUNT		LEEDS & NORTHRUE	4360	09Aug2011	08Aug2012

6120 Hanging Moss Road - Orlando, FL 32807 - Phone: 800-438-8165 - Fax: 407-678-4854

Tektronix

Service Solutions

DATASHEET

Manufacturer: Minolta

Model: TL-1

Workorder #: 602492

Description: Illuminance Meter

Date: 22-May-12

Procedure: Manufacture

Range	Nominal Value	As Found	Result	As Left	Result	Min	Max
30fC (resolution: .1 fC)	10.00	10.1	P	10.1	P	9.7	10.3
300 fC (resolution: 1 fC)	100.0	100.1	P	100	Р	97	103
3000 fC (resolution: 10 fC)	1000.0	1000.0	P	999	P	970	103

Note: Measurement Uncertainty = +/- 2.4% of Indication.

Page 1 of 1



TSI - Customer Service report

Sold-to party

Thank you for the opportunity to service your instrument.

RMA Number: 800235189

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

Ship-to party 5180406

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

5180406

Service Information: Purchase Order Purchase Order Date

CC-Non-Responsiv 03/26/2012

Description Calibration of VelociCalc Plus 8386A

Equipment 57602 VELOCICALC Plus Air Velocity Meter Serial Number 54110581 Material 8386A

Service Description:

Return Reason: CALIBRATION OVERDUE

Findings:

Unit sent in for clean and calibration. The unit passed as found.

Action:

The unit was cleaned, calibrated, and a complete operational checkout

was performed.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1326 of 1990

CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com ENVIRONMENT CONDITION 8386A MODEL. TEMPERATURE 68.4 (20.2) *F (*C) %RH RELATIVE HUMIDITY 36 54110581 SERIAL NUMBER BAROMETRIC PRESSURE 28.61 (968.8) inHg (hPa) AS LEFT IN TOLERANCE As FOUND OUT OF TOLERANCE - CALIBRATION VERIFICATION RESULTS-VELOCITY VERIFICATION SYSTEM V-106 Unit: ft/mln (m/s) ALLOWABLE RANCE STANDARD MEASURED STANDARD MEASURED ALLOWABLE RANGE 0(0.00) 0 (0.00) -3-3 (-0.02-0.02) 643 (3.26) 640 (3.25) 7 623--662 (3.17-3.36) 35 (0.18) 31-37 (0.16-0.19) 8 995 (5.06) 991 (5.03) 965~1025 (4.90-5.21) 34 (0.17) 64 (0.32) 64 (0.32) 61-67 (0.31-0.34) 9 1468 (7.45) 1476 (7.50) 1423-1512 (7.23-7.68) 96~102 (0.49~0.52) 4 99 (0.50) 99 (0.50) 10 2481 (12.60) 2463 (12.51) 2406~2555 (12.22~12.98) 155~164 (0.79-0.84) 4440 (22.55) 160 (0.81) 159 (0.81) 11 4,501 (22.87) 4366~4636 (22.18~23.55) 5 318~338 (1.62~1.72) 8000 (40.64) 7760-8240 (39.42-41.86) 328 (1.67) 325 (1.65) 12 7943 (40.35) 6 **TEMPERATURE VERIFICATION** SYSTEM T-119 Unit: °F (°C MEASURED ALLOWABLE RANGE STANDARD MEASURED ALLOWABLE RANGE STANDARD 32.0 (0.0) 32.1 (0.1) 31.5-32.5 (-0.3-0.3) 2 140.0 (60.0) 1398 (59.9) 139 5~140.5 (59.7-60.3) 1 SYSTEM V-106 Unit: inH ,O (Pa) PRESSURE VERIFICATION STANDARD MEASURED ALLOWABLE RANGE STANDARD MEASURED ALLOWABLE RANGE 4.073 4.084 -4.119--4.027 8.027 (1998.7) 8.074 (2010.4 7.942-8.112 (1977.5-2020.0) (-1014.2) (-1016.9) (-1025.6---1002.8) 14.052 14.114 13.905-14.198 2.007-2.057 (499.7-512.3) 2 2.032 (506.0) 2.041 (508.2) (3498,9) (3514.4) (3462.7-3535.2) Unit: %RH HUMIDITY AS FOUND SYSTEM H-102 ALLOWABLE RANGE STANDARD MEASURED ALLOWABLE RANGE STANDARD MEASURED H # 7.0-13.0 4 70.0 67.0-73.0 1 10.0 11.8 69.1 27.0-33.0 90.0 89.4 87.0-93.0 2 30.0 30.6 5 49.9 47.0-53.0 3 50.0 TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable to NIST, or is derived from decepted values of physical constants. TSI's calibration system is registered to ISO-9001:2008 and meets the requirements of ISO 10012:2003. Measurement Variable System (D Last Cal. Measurement Variable System ID Cal. Due Cal. Due Last Col. DC Voltage 01-20-12 E004477 12-15-11 12-15-12 Temperature E001544 07-20-12 E001558 12-12-11 06-12-12 Pressure E001560 12-12-11 05-12-12 Pressure Velocity 09-19-07 Barometric Pressure 04-08-11 09-19-12 E001992 04-08-12 F003327 01-19-12 07-19-12 E001799 01-19-12 07-19-12 E001800 Temperature Temperature 08-28-12 02-28-12 Humidity E003539 Responsi March 27, 2012 DATE DOL IS CERT_DEFAULT

SI P/N 230015

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1327 of 1990

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not</u> be permitted

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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*)
 - 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. <u>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.</u>

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.

APPENDIX Q

FACILITY INFORMATION WORKSHEET

Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1332 of 1990

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Samples 01 through 05 were collected from the drill floor.				
Are any weapons cleaned in the facility, if yes where are they cleaned?	Yes, weapons are cleaned on the drill floor.				
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Samples 06, 07 and 08 were collected from 25% of the rest of the building.				
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	Live firing range at the Armory. Samples 06 and 07 were collected from inside the IFR.				
Is there any peeling paint? Take bulk sample if able.	No.				
Are there any signs of water damage or mold?	No.				
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	No suspected ACM. Building was new and recently constructed.				
Quality of housekeeping	Great.				
HVAC maintenance plan in place?	Yes, through the State.				
Overall condition of HVAC system	New working condition.				
Obtained CO2, Temp, RH monitoring	Attached to the report.				
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	Attached to the report. Inventory needs to be updated.				
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	2 flammable lockers. No incompatibilities observed during the IHSAV.				

Yes.					
Yes.					
No evidence of monthly inspections.					
Annual fire extinguisher inspections due as of August 2012.					
N/A.					
Yes, posted throughout the facility.					
Hazcom Training program in place.					
N/A.					
No hazardous noise areas identified or observed during the IHSAV.					
Attached to report.					
Breaker panels had proper labeling with no exposed wires.					
 15 military personnel. 3 civilian personnel. 2. Infantry, training, supply, logistics, administrative. 					
CAP (Civilian Air Patrol) – occupy drill floor once a week. ASVAP testing occurs at the facility as well.					
On IHSW Request Only					

Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	Kitchen hood was compliant during IHSAV.
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	No hazardous noise areas.
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	
Name of Armory, POC, phone #, address and organizations in Armory	Kalispell Armory Non-Responsive 2989 Highway 93 North Kalispell, MT 59901
(Add Checklist to Report)	(Add Checklist to Report)

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	Q3	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04				0
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05				0
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06				0
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06				0
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are recommended for control	953-01-07				0
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07				0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled, that are recommended for control	953-01-08				0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled	953-01-08				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09				0
Togal number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	IHT			
Total number of DOEHRS-IH shops coded as Priority 1	953-02-10	IHT			
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	IHT			
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	IHT			
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-12	IHT			
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	IHT			
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	IHT	6		
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	IHT			

Posted to NGB FOIA Reading R May, 2018

OIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1336 of 1990

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	ß	Q2	Q3	Q4 Annual
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	HT	-		
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	HT			
Number of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	IHT			
Number of personnel who required reassessment by industrial hygiene within the last 12	953-02-15	耳			
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	IHT			
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	HT			
Number of personnel for which noise dosimetry was collected during their complete work shift to Buantify their daily noise exposures within the last 12 months.	953-02-17	IHT			
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	IHT			
Nushber of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18				4
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18	o 0			4
Number of ventilation systems which require corrective action based on deficiencies identified during an IH survey	953-02-19				0
Number of ventilation systems which were evaluated by an IH	953-02-19				4
by an IH with recommendations	953-02-20	IHT			0
required IH evaluation and recommendations	953-02-20	IHT		<u>10</u>	0

row 8/2012

Kalispell Armon Kalispell M⁻

Posted to NGB FOIA Reading Roo May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1337 of 1990

PIN 2300

CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigas Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

EN	VIRONMENT C	ONDITION				M	DDEL			8386A
TE	MPERATURE		69.1 (20.5)	°F (°C)				-		GOODA
RE	LATIVE HUMIDIT	Y	37	%RH		Co	RIAL NUM			54110581
BA	ROMETRIC PRES	SURE	28.61 (968.8)	inHg (hPa)		96	KIAL NOM	BER		54110301
-	AS LEFT			2	INT	OLER	ANCE	-		- and a state of the
	AS FOUND			0	Jan	OF T	OLERANCE			
-		- CAL	IBRAT	ION VE	. R I	F I	CATIO	N	RESULT	s –
TI	MPERATURE	VERIFICATION		-	S	YSTI	EM T-119		and the second	Unit: °F (°C.
#	STANDARD	MEASURED	ALLOWAL	BLE RANGE	11	S	TANDARD	N	MEASURED	ALLOWABLE RANGE
1	32.0 (0.0)	32.1 (0.1)	31.5~32.5	(-0.3~0.3)	2	14	0.0 (60.0)	1	39.8 (59.9)	139.5-140.5 (59.7-60.3)
PF	ESSURE VERI	FICATION			S	VSTI	EM V-106			Unit: inH2O (Pa
#	STANDARD	MEASURED	ALLO	WABLE RANG	E	1	STANDAR	D	MEASURED	ALLOWABLE RANGE
1	-4.073	-4.084		119~-4.027)	3	8.027 (1998	8.7)	8.074 (2010.4)	7.9428.112 (1977.5-2020.0
2	2.032 (506.0)	2.041 (508.2)	2.007-2.0	057 (499.7~51	2.3)	4	14.052 [3498.9])	14.114 (3514.4)	13.906~14.198 (3462.7~3535.2)
н	UMIDITY VERI	FICATION			S	YSTI	ЕМ Н-102	_		Unit: %RI
#	STANDARD	MEASURED	ALLOW	ABLE RANGE	3	#	STANDARD		MEASURED	ALLOWABLE RANGE
ĩ	10.0	11.8	7	.0-13.0	-	4	70.0		69.1	67.0-73.0
2	30.0	30.6	2	7.0-33.0		5	90.0		89.4	87,0~93.0
3	\$0.0	49.9	4	7.0~53.0						
V	ELOCITY VER	FICATION			S	YST	EM V-110			Unit: ft/min (m/s
	STANDARD	MEASURED	ALLOWABLE RANGE		1	STANDARD		N	TEASURED	ALLOWABLE RANGE
ī	0 (0.00)	0 (0.00)	-3-3 (-0.	02~0.02)	7 6		648 (3.29)		546 (3.28)	629-667 (3.19-3.39)
2	35 (0.18)	34 (0.17)	32~38 (0.	16-0.19)	8	9	96 (5.06)	1.2	997 (5.06)	966-1025 (4.91-5.21)
3	64 (0.33)	64 (0.32)	61-67 (0.	31~0.34)	9	14	76 (7.50)	1	1476 (7.50)	1432-1521 (7.27-7.72)
4	99 (0.50)	99 (0.50)	96~102 (0.	49-0.52)	10	24	76 (12.58)	2	472 (12.56)	2401-2550 (12.20-12.95)
5	150 (0.81)	159 (0.81)	155~165 (0	79-0.84)	11	44	98 (22.85)	4	548 (23.10)	4363-4633 (22.17-23.54)
6	346 (1.76)	346 (1.76)	335-356 ()	70 1.013	12	30	\$8 (40.58)	×	013 (40.71)	7748-8227 (39.36~41.80)

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not opplicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been wrified with respect to Instrumentation whose networks is traceable to NIST, or is derived from accepted values of physical constants. TSI's calibration system is registered to ISO-9001;2008 and meets the requirements of ISO 10013;2003.

Measurement Variable Temperature	System ID E001100	Last Cal. 01-19-12	Cal. Duc 07-19-12	Measurement Variable Temperature	System 1D E001799	Last Cal. 01-19-12	Cal. Duc 07-19-12
DC Voltage	E004477	12-15-11	12-15-12	Temperature	E001644	01-20-12	07-20-12
Pressure	E001558	12-12-11	06-12-12	Pressure	E001360	12-12-11	06-12-12
Velocity	E003327	09-19-07	09-19-12	Barometric Pressure	E001992	04-08-11	04-08-12
Humidity	E003539	02-28-12	08-28-12	DC Voltage	E001658	06-28-11	12-28-12
Temperature	E004402	12-08-11	06-08-12	Pressure	E001719	12-13-11	06-13-12
Pressure	E001721	12-13-11	06-13-12	Barometric Pressure	E001992	04-08-11	04-08-12
Velocity	15003327	09-19-07	09-19-12	a second second second			
210		_					

on-Responsiv

DOC ID. GERT_DEFAULT

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1338 of 1990

March 27, 2012 DATE

3M Occupational Health and Environmental Safety Division

Quest Technologies 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questlechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax



Page 1 of 2

Certificate of Calibration

Date Received:

Model Conditions:

Date Issued:

Valid Until:

Serial Number:

As Found:

As Left:

25923

3/2/2011

4/27/2011

N/A

Certificate No: 1095258 CDF020012

Submitted By:

10510 SUPERFORTRESS AVE.

MATHER, CA 95655

Serial Number: CDF020012

Model:

IHSW-NGB

Customer ID: 2900 SLM

Test Conditions:

18°C to 29°C Temperature: 20% to 80% Humidity:

Barometric Pressure: 890 mbar to 1050 mbar

SubAssemblies:

Description:

MICROPHONE QE 7052 1/2 IN. ELECTRET TYPE 2 PREAMP

ibration Procedure: 56V995

Reference Standard (s) :

I.D. Number	Device
ET0000453	FLUKE 45 MULTIMETER
ET0000556	B&K ENSEMBLE
Col Colores and Co	0.02.02.02.000

Measurement Uncertainty:

+/- 2.2% ACOUSTIC (0.1908)+/- 1.4% VAC +/- 0.1% VDC Estimated at 95% Confidance Lavel (k=2)

Calibrated By:

Reviewed/Approved By:

Last Calibration Date Calibration Due 3/2/2013

4/27/2012

3/29/2012

3/29/2012

3/28/2012

3/29/2012

3/29/2013

IN TOLERANCE

IN TOLERANCE

This report certifies that all calibration equipment used in the test is traceable to NIST or other NMI, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of Quest Technologies.

Respons

098-393 Rev. B

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1339 of 1990

3M Occupational Health and Environmental Safety Division

31

Quest Technologies 1060 Corporate Center Drive Occonomowoc, WI 53066-4828 www.questtechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax



Page 2 of 2

£

Certificate of Calibration

Certificate No: 1095258 CDF020012

(A) indicates out of tolerance condition

Test Type	Nominal	Toleranc	e- Tolerance+	As Found	As Left	Unit
Calibration	110.0	109.5	110.5	110.1	110.0	dB
A Weighting/125Hz	93.9	92.4	95.4	94.4	94.3	dB
A Weighting/250Hz	101.4	99.9	102.9	101.8	101.7	dB
A Weighting/500Hz	106.8	105.3	108.3	107.0	106.9	dB
A Weighting/1kHz	110.0	109.5	110.5	110.1	110.0	dB
A Weighting/2kHz	111.2	109.2	113.2	111.5	111.4	dB
C Weighting/125Hz	109.8	108.3	111.3	110.6	110.5	dB
C Weighting/250Hz	110.0	108.5	111.5	110.7	110.5	dB
C Weighting/500Hz	110.0	108.5	111.5	110.5	110.3	dB
C Weighting/1kHz	110.0	109.5	110.5	110.2	110.1	dB
C Weighting/2kHz	109.8	107.8	111.8	110.2	110.1	dB
Lin Weighting/125Hz	110.0	108.5	111.5	110.8	110.7	dB
Lin Weighting/250Hz	110.0	108.5	111.5	110.7	110.6	dB
Lin Weighting/500Hz	110.0	108.5	111.5	110.5	110.4	dB
Lin Weighting/1kHz	110.0	109.5	110.5	110.2	110.1	dB
Lin Weighting/2kHz	110.0	108.0	112.0	110.4	110.3	dB
Lin/60 - 120/120	120.0	118.8	121.2	120.6	120.5	dB
Lin/60 - 120/110	110.0	109.5	110.5	110.1	110.0	dB
Lin/60 - 120/100	100.0	98.8	101.2	99.9	99.8	dB
Lin/60 - 120/90	90.0	88.8	91.2	90.0	89.9	dB
Lin/40 - 100/90	90.0	88.8	91.2	89.8	89.8	dB
Lin/40 - 100/80	80.0	78.8	81.2	79.9	79.8	dB
Peak/60 - 120/120	123.0	121.5	124.5	122.2	122.0	dB
Peak/60 - 120/110	113.0	111.5	114.5	113.1	112.9	dB
Peak/60 - 120/100	103.0	101.5	104.5	103.0	102.8	dB
Peak/60 - 120/90	93.0	91.5	94.5	93.1	93.0	dB
DC Out/120dB	1.000	0.950	1.050	1.008	1.005	VDC
AC Out/120dB	3.160	2,920	3.430	3.252	3.196	VAC

* indicates non accredited

098-393 Rev. B

Posted to NGB FOIA Reading Room May, 2018

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1340 of 1990

CRO PRECISION LIBRATION INC

MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95649 (530) 268-1860

Certificate of Calibration

Date: Nov 20, 2012

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

MPC Control #: CD3921 Asset ID: 1245 Gage Type: IAQ METER Manufacturer, TSI Model Number: 8551 Size: N/A 68.9°F / 35.6 % Temp/RH:

Calibration Notes:

Work Order #: Purchase Order #: Serial Number: N/A Department, Performed By: Received Condition: IN TOLERANCE Returned Condition: .IN TOLERANCE Cal. Date: Cal, Interval: Cal. Due Dale:

SAC-7004499 013.IH1374.00 51380

Cert No.

November 19, 2012 12 MONTHS November 19, 2013

2008120221675

Standards Used to Calibrate Equipment

ID.	Description. Model Serial	Manufacturer	Cal. Due Date Traceability#
CC8185	NULTIFUNCTION PROCESS 726 1355148 CALIBRATOR	FLUKE	Nov 5, 2013 2006120211043
12270	LASER PARTICLE COUNTER 200L-1-115-1 90056761A	METONE	Apr 30, 2013 2008120175502

Procedures Used in this Event

Procedure Name Description PARTICLE COUNTER PARTICLE COUNTERS

971 TEMP/HUMIDITY METER TEMPHUMIDITY METER (FLUKE) 971

Calibrating Technician QO Approval:

N d mg k=2, which for n on noil white la nis to a c noi is at d as the standard uncertainty of m nt minific OR WICH BA'S Public and NIST Technical Note 1297, 1994 Edition. Services rande of approximationy 93%. The scienciard uncertainty of measurement h ISO 17025/2005, ISO 9001/2008, ANSI/NCSI, Z540-1, MPC Da by Manual, MPC C8D and with colet

ed by the customer. Any further of factors may cause an instrument to doll out of beamine before the next maintal conditions and customer's established systematic accuracy. The information on this report, parameter ogi (NIST) and/or recognized o to SI the uch the National Institute of Standards and Tech Sand

Page 1 of 1

(CERT, Rev.3)

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1341 of 1990

BEST AVAILABLE COPY TABLE 1

LEAD WIPE SAMPLE RESULTS KALISPELL ARMORY KALISPELL, MONTANA SEPTEMBER 27, 2012

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG/HUE Standard (µg/ft ²)
92712-Kalispell-01	Drill Floor	Southeast corner of drill floor, floor area sample	< 2.5	≤ 40
92712-Kalispell-02	Drill Floor	Northeast corner of drill floor, floor area sample	< 2.5	≤ 40
92712-Kalispell-03	Drill Floor	Center, middle of drill floor, floor area sample	< 2.5	≤40
92712-Kalispell-04	Drill Floor	Northwest corner of drill floor, floor area sample	< 2.5	≤ 40
92712-Kalispell-05	Drill Floor	Southwest corner of drill floor, floor area sample	< 2.5	≤ 40
92712-Kalispell-06	Indoor Firing Range	North area of room floor sample	< 2.5	≤200
92712-Kalispell-07	Indoor Firing Range	South area of room floor sample	< 2.5	≤200
92712-Kalispell-08	Hallway	Middle of floor area sample	< 2.5	≤40

μg/ft² = micrograms per square foot ARNG = Army National Guard HUD = The US Department of Housing and Urban Development



ANALYTICAL REPORT

Report Date: October 15, 2012

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630

Phone: (916)	353-2370 x 20
Fax: (916)	353-2375



Workorder: 34-1228525 Client Project ID: 013.II-I1374.60/Kalispell, MT Purchase Order: 013.IH1374.60 Project Manager:

Analytical Results

Sample ID: 92712-Kalispell-01	Med	Media: Ghost Wipe					
A STATE AND A STATE AND AND AND A STATE AN		Sampling Location: Kalispell, MT			npling Location: Kalispell, MT		Received: 10/11/2012
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			Prepared: 10/12/2012 Analyzed: 10/15/2012			
Analyte	ug/sample	ug/ft ²	RL (ug/sample)				
Lead	<2.5	<2.5	2.5				

Sample ID: 92712-Kalispell-02	Media: Ghost Wipe Sampling Location: Kalispell, MT Sampling Parameter: Area 1 ft ²			Collected: 09/27/2012				
Lab ID: 1228525002						A STATE AND A STATE AND A STATE		Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012				
Analyte	ug/sample	ug/ft²	RL (ug/sample)					
Lead	<2.5	<2.5	2.5					

Sample ID: 92712-Kalispeli-03	Media: Ghost Wipe		Collected: 09/27/2012	
		Sampling Location: Kalispell, MT		
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			Prepared: 10/12/2012 Analyzed: 10/15/2012
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	The Section State of
Lead	<2.5	<2.5	2.5	

Sample ID: 92712-Kalispell-04	Media: Ghost Wipe		Collected: 09/27/2012				
Lab ID: 1228525004 Sampling Locat		Sampling Location: Kalispell, MT			1228525004 Sampling Location: Kalispell, MT		Received: 10/11/2013
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ^z			Prepared: 10/12/2012 Analyzed: 10/15/2012			
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	A Set of the set of the set of the			
Lead	<2.5	<2.5	2.5				

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, USA 84123 PHONE +1 801 266 7700 FAX +1 801 268 9992 A Campbell Brothers Limited Company Part of the ALS Laboratory Group ALS GROUP USA, CORP.

www.alsglobal.com

RIGHT SOLUTIONS MIGHT PARTNER

HE'S I AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by Mattern (2-0085 (MT) Released by National Guard Bureau Page 1343 of 1990



ANALYTICAL REPORT

Workorder: 34-1228525 Client Project ID: 013.IH1374.60/Kalispell, MT Purchase Order: 013.IH1374.60 Project Manager: Non-Responsive

Analytical Results

Med	dia: Ghost Wipe	•	Collected: 09/27/2012				
Sampling Location: Kalispell, MT Sampling Parameter: Area 1 ft ²			Sampling Location: Kalispell, MT		1228525005 Sampling Location: Kalispell, MT		Received: 10/11/2012
			Prepared: 10/12/2012 Analyzed: 10/15/2012				
ug/sample	ugift	RL (ug/sample)					
<2.5	<2.5	2.5	and a second second second				
	Sampling Locat Samplin ug/sample	Sampling Location: Kalispell, M Sampling Parameter: Are ug/sample ug/ft*	Sampling Parameter: Area 1 ft ² ug/sample ug/ft ² RL (ug/sample)				

Sample ID: 92712-Kalispell-06	Me	dia: Ghost Wipe)	Collected: 09/27/2012				
Lab ID: 1228525006	Sampling Location: Kalispell, MT Sampling Parameter: Area 1 ft ^a							Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012				
Analyte	ug/sample	ug/ft²	RL (ug/sample)					
Lead	<2.5	<2.5	2.5					

Sample ID: 92712-Kalispell-07	Med	dia: Ghost Wipe		Collected: 09/27/2012				
Lab ID: 1228525007	Sampling Location: Kalispell, MT Sampling Parameter: Area 1 ft ^z					The second		Received: 10/11/201
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012				
Analyte	ug/sample	ug/ft²	RL (ug/sample)					
Load	<2.5	<2.5	2.5					

Sample ID: 92712-Kalispell-08	Media: Ghost Wipe Sampling Location: Kalispell, MT Sampling Parameter: Area 1 ft ²			Collected: 09/27/2012				
Lab ID: 1228525008				and the second se		P Report D Report NT		Received: 10/11/2012
lethod: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012				
Analyte	ug/sample	ug/ft ²	RL (ug/sample)					
Lead	<2.5	<2.5	2.5					

Report Authorization

Method	Analyst	Peer Review	100
NIOSH 7300 Mod.	Non-Responsive	Non-Responsive	
In our root mout			

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com

BIES, TAMAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1344 of 1990

ANALYTICAL REPORT

Workorder: 34-1228525 Client Project ID: 013.IH1374.60/Kalispell, MT Purchase Order: 013.IH1374.60 Project Manager: Non-Responsive

General Lab Comments

The results provided in this report relate only to the items tested. Samples were received in acceptable condition unless otherwise noted. Samples have not been blank corrected unless otherwise noted. This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the guality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP) Utah (NELAC) Nevada Oklahome Iowa Florida (TNI) Texas (TNI)	ADE-1420 DATA1 UT00009 UT00009 IA# 376 E871067 T104704456-11-1	http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/bsdw/labservice.htm http://www.iowador.gov/lisideDNR/RegulatoryWater.aspx http://www.dep.state.fl.us/labs/bars/ses/qe/ http://www.tceq.texas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Lead Testing: CPSC Soil, Dust, Paint ,Air	ACLASS (ISO 17025, CPSC) AIHA (ISO 17025, AIHA ELLAP and NLLAP)	ADE-1420 101574	http://www.aclasscorp.com http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

₩ 1228	3525		-	AL REQUEST	FORM	SE
		ſ		Status /		0.0
				REQUIRED BY	DATE	
(AL	.S)	, 11/2-	CONTACT	ALS SALT LAKE PRIOR T		
Date 9127112	Purchase Order No.	, 1H1324	· 60	4. Quote No.	Non-Responsi	ve
Company Name	all shout			ALS Project Manager		
Address 1141	Sibley Street			5. Sample Collection Sampling Site La	lisyell, ART	
Person to C		onei	10		my National	Guan
Telephone	n-Resp	onsi	Ve	Date of Collection	715 2/12	
Fax Telephe				Time Collected	1:00	
E-mail Addi				Date of Shipment	019/2012	
Billing Address (ir untere	na nom above)			Chain of Custody No.		
				6. How did you first learn	about ALS?	
	and the second second					
REQUEST FOR ANALY	YSES					1
Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED	- Use method number if known	Units**
		Filiostwike	1442	- Lead Nost	7300	
*	9242-Kalispeli-02		and from			
	92712-144/jpell-0)				11-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1	
	92712 Kaispell -049					1
	92ni-kaseni-ol					
	92:112-Kalipeell-07	1	4			
	92712-Karchrell-00	· V	V	V		_
	1		-			
						-
					- 100	
		-				-
Specify: Solid sorbent	iube, e.g. Charceal; Filter type; ³ 3. ppm 4. % 5. μg/m ³	Impinger solution 6 (other)	Bulk comple; Bloc Please indicate o	d; Urine; Tissue; Soil; Wat one or more units in the col	er; Cther umn entitled Units**	
mmenta	1					
ssaible Centamination at	nd/or Chemical Hazards					
Chain of Cr	n-Respons	ivo		List.	1.010	0
alinquished b	FIXespons	IVC		_Date/Time0	1/12 12:00	m
aceived by				_Date/Time_104	112 2:40	j'PM
finguished b				_ Date/Time		
				Date/Time 10111	12 0915	1
eceived by				Sarer inter to the		

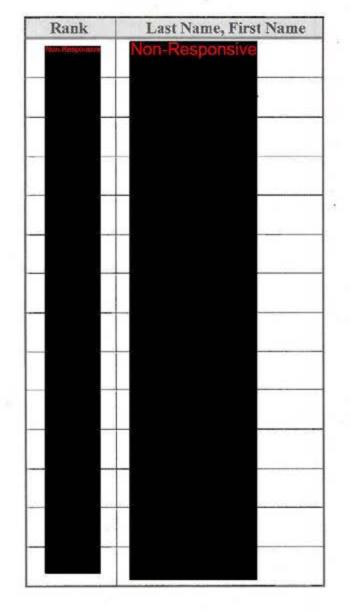
Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1346 of 1990

BEST AVAILABLE COPY EMPLOYEE LIST

KALISPELL ARMORY KALISPELL, MONTANA SEPTEMBER 27, 2012



Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1347 of 1990

1
1
Current Current

Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS

CONTROL					SHOPENSE	ACTION	Estimated	DATE	
NUMBER	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	DATE	OIC/NCOIC	Cost(s)	CORRECTED	REFERENCES
CLOSED X	Contraction and Contraction of the					South South U.S.	1 the second second		
MTKALISPELL-	MTKALISPELL- Chemical inventory out of date.	Armony		Update the chemical inventories of the					29 CFR
92712 - 4.7.1		Flammable Lockers	4	Flammable Lockers to represent the materials on hand at the facility.					d Reco
MTKALISPELL- 92712 - 4.11.2	MTKALISPELL- No evidence of monthly fire 92712 - 4.11.2 extinguisher inspections.	Armory	a	Ensure that the fire extinguishers are inspected and documented on a monthly basis.					29 CFR 1910-157(e)(2)
MATE AL IODELL	ATTAI IODELL Consul See ovtionichor			Have fire extinguishers inspected on an annual					29 CFR
92712 - 4,11.2 inspect	92712 - 4.11.2 inspections out of date as of	Armory	4	basts,	•				1910.157(e)(3)

BEST AVAILABLE COPY

Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1348 of 1990

APPENDIX-N: CONCEUSIONS AND RECOMMENDATIONS

KALISPELL ARMORY KALISPELL MONTANA SEPTEMBER 27, 2012

N.1

Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for the Kalispell Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Findings and Recommendations; Item 2 – Painted Surface Evaluation).

N4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS) – The chemical inventories were out of date for the chemicals stored. Update the chemical inventories of the Flammable Lockers to represent the materials on hand at the facility.

N4.11.2 Safety Walk-Through – There was no evidence of monthly fire extinguisher inspections at the Armory. Ensure that the fire extinguishers are inspected and documented on a monthly basis.

Annual fire extinguisher inspections are out of date as of August. Have fire extinguishers inspected on an annual basis to comply with OSHA standards.



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Mexico • Nebraska

Industrial Hygiene Site **Assistance Visit**

Lewistown Armory 863 Airport Road Lewistown, MT 59457

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916) 854-1491

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1350 of 1990



BEST AVAILABLE COPY DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-IHSW

7 January 2013

MEMORANDUM THRU Montana Army National Guard, ATTN: Non-Responsive (DSS), Montana Medical DET, Troop Medical Clinic Rm 1009, 1956 MT Majo Street, Fort Harrison, MT 59636

FOR Commander, Lewistown Armory 863 Airport Road, Lewistown, MT 59457

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Lewistown Armory, Montana conducted on 59457.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Lewistown Armory at 863 Airport Rd., Lewistown, MT on 04 OCT 2012.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1351 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Lewistown Armory, Montana conducted on 59457.

a. A building inspection of the armory, for asbestos, should be provided and a management plan in place for personnel working at and on the facility should be written from that inspection. (para. 4.4) (RAC 3)

b. Converted IFR should be inspected for past water seepage/intrusion before winter snows start melting & spring rains commence. This discrepancy should be corrected and all water damaged materiel's replaced to help prevent a potential Indoor Air Quality issue. (para. 4.3) (RAC 3)

c. Personnel should clean entire Converted Indoor Firing Range (IFR) area, focusing on horizontal areas, by utilizing provided Armory Clean-Up SOP. This area should be below 200 ug/ft2 after implementing better housekeeping practices. (para. 4.1) (RAC 3)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

Corrective measures should be implemented and accomplished at the lowest levels possible. Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

3. Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

4. Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

5. The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

Hazard Assessment/Job Safety Analysis (JSA).

a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1352 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Lewistown Armory, Montana conducted on 59457.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the Senior Unit Commander of this Facility and any Co-Tenant Organizations or Units, review and provide assistance with implementation of these recommendations. This will educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at

NGB, IHSW, CIV Industrial Hygiene

BEST AVAILABLE COPY

10	
600	NTDO!
5	00
	ъ

Industrial Hygiene, Southwest Hazard Inventory Log

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1354 of 1990

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> <u>but check with local Environmental Office.</u>
- 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.

- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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)
 - 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. <u>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.</u>

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.

Appendices

· · · · · · · · · · · · · · · · · · ·	D.C.
Appendix A	References
Appendix B	Assessment Criteria
Appendix C	Photo Log
Appendix D	Chemical Inventory
Appendix E	Floor Plan /IAQ - Temp, RH, & CO2 Monitoring
Appendix F	Ventilation Data
Appendix G	Field Notes
Appendix H	Calibration Certificates
Appendix I	Air Sampling & Metal/Lead Wipe Tables
Appendix J	Laboratory Reports
Appendix K	Employee List
Appendix L	IHSW Violation Inventory Log
Appendix M	Hazard Assessments
Appendix N	Recommendations
Appendix O	DD Forms 2214
Appendix P	IHSW Lead-Cleanup SOP
Appendix Q	Facility Information Worksheet
Appendix R	Installation Status Report (ISR)

IHSAV Lewistown Armory Lewistown, Montana

Posted to NGB FOIA Reading Room May, 2018

NES, Inc. NES Job Number: 013.1111374.77

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1359 of 1990

1.0 INTRODUCTION

During October 4, 2012, Non-Responsive ndustrial Hygiene Field Technician of NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Lewistown Armory located at 863 Airport Road in Lewistown, Montana 59457. The primary point of contact for information gathered during this survey was Non-Responsive hone: (406) 324-5595, email: Non-Responsive

1.1 IHSAV Objectives

The objective of the IHSAV is to evaluate the occupational environment of the administrative areas in the Armory to determine the presence of operational health and safety risks and make recommendations for corrective actions or follow-up work to assist the Army National Guard in managing those risks.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the armory for water damage and the presence of fungal growth;
- Review asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the condition of the Heating, Ventilation, and Air-Conditioning system and collect indoor air quality data;
- Review hazardous material storage and use procedures;
- · Review safety training, and record keeping;
- · Perform a ventilation survey on the kitchen stove hood (if present);
- · Perform a noise survey on the kitchen appliances, and;
- Conduct a safety walk-through evaluation and note any existing safety hazards.

IHSAV Lewistown Armory Lewistown, Montana

Page 2 of 12

NES. Inc. NES. Job Number: 013.1H1374.77

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1360 of 1990

2.0 PROCESS DESCRIPTION

The Lewistown Armory has three full time guard members and one full time state employee. The Armory has offices used for administrative purposes and recruiting purposes. The Lewistown Armory contains a drill floor for Army National Guard member training functions. The Armory contains a converted indoor firing range (IFR) which is now used as a locker room and supply room. Classrooms are also located at the Armory and are used for varied purposes. Civilian functions are occasionally carried out in this Armory including temporary leases for events such as a dog training school which is only held throughout the summer months approximately once a week. The drill floor is occasionally used by Army National Guard members as a staging area to clean weapons.

IHSAV Lewistown Armory Lewistown, Montana Page 3 of 12

NES, Inc. NES Job Number: 013.IH1374.77

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1361 of 1990

3.0 METHODS

3.1 Lead Wipe Sampling

Metals wipe samples were collected on horizontal work and floor surfaces in various locations throughout the facility. Ghost Wipe[™] brand wipes were used by wiping a one square foot template. The collected wipe samples were placed in clean and labeled centrifuge tubes. Samples were submitted to ALS Environmental Laboratories located in Salt Lake City, Utah for analysis, using NIOSH Method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust. See Appendix E for a drawing of sample locations. See Appendix I, table 1 for lead wipe sampling analytical results. See Appendix J for laboratory reports.

3.2 Painted Surface Evaluation

The interior and exterior of the Armory was visually inspected for peeling paint on the walls and ceilings. No paint chip samples were collected in the interior because no peeling paint was encountered. All samples, if collected, are submitted to ALS Laboratory Group (ALS) in Salt Lake City, Utah. ALS analyzes the samples for lead using NIOSH 7300 modified method.

3.3 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the Armory was visually inspected for water damage and subsequent fungal growth resulting from moisture. Any water impacted areas noted was documented on a drawing for a follow-up evaluation.

3.4 Asbestos Documentation

An evaluation asbestos documentation was performed. This evaluation consisted of determining if an asbestos survey and assessment have been done. If any suspected asbestos containing material (ACM) is suspected, bulk sampling is performed.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation, and air-conditioning systems that serve the Armory was accomplished. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system was performed to note any obvious operational problems.

IHSAV Lewistown Armory Lewistown, Montana Page 4 of 12

NES, Inc. NES Job Number: 013.IH1374.77

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1362 of 1990

CC

Carbon dioxide (CO₂), temperature, and relative humidity were measured throughout the Armory using a TSI IAQ-CalcTM Meter, Model 8551. The unit was calibrated before use with certified zero gas and 1,000-ppm CO₂ span gas. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. See Appendix E for IAQ data.

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the Lewistown Armory. The instrument used for the illumination survey was a Konica Minolta Light Meter, Model TL1. Measurements taken were obtained at typical working locations such as desks, computers, workstations and general working areas. See Appendix E for illumination data.

3.7 Hazardous Material Storage and Use Procedures

A review of the Armory's chemical inventory and material safety data sheet (MSDS) file was accomplished. Chemical storage areas, i.e., flammable storage cabinets/rooms were also inspected as part of this IH Site Assistance Visit.

3.8 Safety Training and Record Keeping

An inspection of the Armory's training programs and training documentation was performed to determine if the site specific training programs and annual documentation is current.

3.9 Exhaust Ventilation Survey

An exhaust ventilation survey was not conducted as access to the kitchen was not available at the time of the IHSAV.

3.10 Sound-Level Measurements

Sound-level measurements were not made on kitchen appliances as access to the kitchen was not available at the time of the IHSAV.

3.11 Safety Walk-Through

A safety walk-though evaluation of the Armory was performed to document the presence of a fire alarm, to determine if fire extinguishers are properly mounted and are current on their monthly and annual inspections, ground fault circuit interrupter (GFCI) measurements and

IHSAV Lewistown Armory Lewistown, Montana Page 5 of 12

NES, Inc. NES Job Number: 013.IH1374.77

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1363 of 1990 inspection, if eyewash stations inspections are current, and to document any fire or safety hazards in the Armory.

3.12 Equipment Used

The following equipment was used for this survey.

Туре	Model Number	Serial Number	Calibration Date
TSI VelociCalc [™] Plus Meter	8386A	54110581	03/2012
TSI IAQ-Calc™ Meter	8551	81380	11/2012
Konica Minolta Light Meter	TLI	002579029	05/2012

Please see Appendix H for a complete inventory of calibration certificates for equipment that may have been used during this IHSAV.

3.13 Quality Assurance

NES, employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- Use of appropriately educated and experienced personnel;
- Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs and;
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

IHSAV Lewistown Armory Lewistown, Montana Page 6 of 12

NES, Inc. NES Job Number: 013.IH1374.77

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1364 of 1990

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Wipe Sampling

Wipe samples for lead dust, were collected from horizontal surfaces in selected representative areas of the Lewistown Armory to determine if housekeeping efforts are successful. The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot $(\mu g/ft^2)$ as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 $\mu g/ft^2$ is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

A total of 7 Ghost Wipe[™] lead samples were taken during the time of the IHSAV. The first five samples were collected from the drill floor surface areas. The 2 additional areas sampled were collected from the converted indoor firing range which now serves the purpose of a locker room and a storage area.

The analytical results for the drill floor areas were below the 40 μ g/ft² criterion. The floor sample from the locker room area, at the north end of the converted indoor firing range was below the 200 μ g/ft² criterion. The floor sample from inside the storage locker, south end of the converted IFR (previous area where the bullet trap was located in the IFR) was over the 200 μ g/ft² criterion. The analytical results are provided in the table below.

IHSAV Lewistown Armory Lewistown, Montana Page 7 of 12

NES, Inc. NES Job Number: 013.IH1374.77

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1365 of 1990

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard
10412-Lewistown-01	Drill Floor	Southwest corner of drill floor, floor area sample	5.1	$40 \ \mu g/ft^2$
10412-Lewistown-02	Drill Floor	Northwest corner of drill floor, floor area sample	2.7	40 μg/ft ²
10412-Lewistown-03	Drill Floor	Center, middle of drill floor, floor area sample	<2.5	40 µg/ft ²
10412-Lewistown-04	Drill Floor	Northeast corner of drill floor, floor area sample	<2.5	40 μg/ft ²
10412-Lewistown-05 Drill Floor Southeast corner of drill floor area sample		Southeast corner of drill floor, floor area sample	9.6	40 µg/ft ²
10412-Lewistown-06	Converted IFR	Floor sample from the north area of room	29	200 μg/ft ²
10412-Lewistown-07	Converted IFR	Floor sample from inside storage locker, south end of converted IFR (previous area where the bullet trap was located in the IFR)	440	200 µg/ft

See Table 1 in Appendix I for a table of results. The laboratory reports are supplied in Appendix J.

4.2 Painted Surface Evaluation

No paint chip samples were collected during the time of the IHSAV because no peeling paint was observed in the interior or the exterior of the building.

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

During the inspection of the facility, water damage was a concern to the personnel who occupy the building. According to our POC Non-Responsive the converted IFR has flooding issues. The converted IFR is now a locker room and storage area. According to the employees, the flooding occurs yearly between winter and spring months when rain and snow accumulation are high. The converted IFR is located below ground level, but employees are unsure of point of entry for the water. During the IHSAV, there was no water damage evidence or where the water has been entering the building. Follow-up evaluations for drainage solutions and a mold evaluation should be considered.

4.4 Asbestos Documentation

No asbestos documentation was found at the facility.

IHSAV Lewistown Armory Lewistown, Montana Page 8 of 12

NES, Inc. NES Job Number: 013.IH1374.77

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1366 of 1990

APPENDIX A

REFERENCES

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process

AR 385-10, The Army Safety Program

Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

TB MED 503, The Army Industrial Hygiene Program

- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

APPENDIX B

ASSESSMENT CRITERIA

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences. Occupational Exposure Limit

Posted to NGB FOIA Reading Room May, 2018

APPENDIX B

ASSESSMENT CRITERIA

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences. Occupational Exposure Limit

Posted to NGB FOIA Reading Room May, 2018

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).



Photo 1: Exterior of Lewistown Armory, located in Lewistown, Montana.

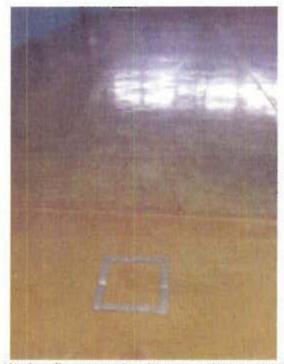


Photo 2: Lead wipe floor sample 10412-Lewistown-01 from the northeast corner of the Drill Floor.



Photo 1: Exterior of Lewistown Armory, located in Lewistown, Montana.

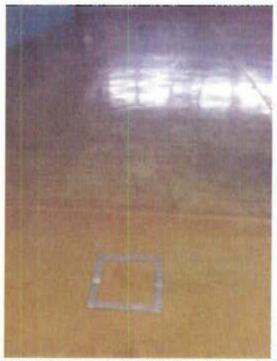


Photo 2: Lead wipe floor sample 10412-Lewistown-01 from the northeast corner of the Drill Floor.



Photo 3: Lead wipe floor sample 10412-Lewistown-02 from the southeast corner of the Drill Floor.



Photo 4: Lead wipe floor sample 10412-Lewistown-03 from the center of the Drill Floor.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1373 of 1990

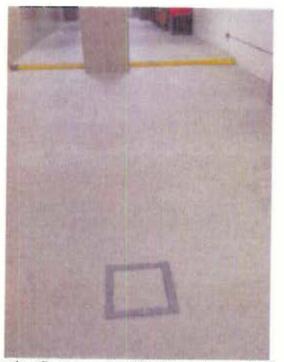


Photo 7: Lead wipe floor sample 10412-Lewistown-06 from the northern end of the converted Indoor Firing Range.



Photo 8: Lead wipe floor sample 10412-Lewistown-07 from the storage locker, south end of the converted Indoor Firing Range.

Montana ARNG Hazardous Materials Inventory Database. r this inventor.

BEST AVAILABLE COPY

Print Inventory

Print Inventory Cancel

Unit: DET 1 CO A 1st BN 163D IN Storage: FL 01 Month: 1/1/2012

SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсо
	ANTI-RUST PRIMER		COAST TO COAST		1	CAN		8
	Automotive Grease		Battenfield		3	Tube	.4	
	Baking soda		Liberty Chemicals	BLCYZ	6	вох		
	CUP	9150-01-053-6688	Military		Z	1 gal		
	CPC	8030-01-134-6513	F&LCO	CFDFB	1	CAN		
Desc	Deisel Engine Oil cription: 15w40		Safety Clean System		1	1 qt		
Desc	Fleet Charge	,	Old Ward Industires*		2	3.78 L		
	LUBE OIL 2 CYCLE	fs	MCCOLLUGH		1	BOTTLE		
	PAINT, ENAMEL		COLUMBIA PAINT AND COATING		3	GAL		
	PAINT, ENAMEL		PPG		1	GAL		9
	PAINT, ENAMEL		COLUMBIA PAINT AND COATING		1	5 GAL		

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 6/18/2012

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1375 of 1990

- -

WOIlidiid MININO LIAZARGOUS P	VIACCELLIS ILL'ULIUN	
-------------------------------	----------------------	--

PAINT, LATEX		COLUMBIA PAINT AND		1	5 GAL	
PAINT, LATEX	on	VALSPAR	Yr	1	GAL	
PAINT, LATEX		VALSPAR		1	QAURT	
PAINT, LATEX		ACE		° z	GAL	
PAINT, LATEX	3.	COLUMBIA PAINT AND COATING		1	QUART	
PAINT, LATEX		COLUMBIA PAINT AND COATING		4	GAL	
PAINT, LATEX (RED)		UNITED COATING		1	1/2 PINT	
Scrub Wipes		Horizon		2	box of 300 sheets	
cription: Cleaning) Sheets				e g	
SPARY PAINT		NONE		1	CAN	
SPRAY PAINT (RED)		PAMIDA		1	CAN	
SPRAY PAINT (WHITE)	8010-00-584-3150	LHB SO-SURE		1	CAN	
TAP PRIMER		SCOTCH		1	CAN	
WATER, REGEANT		AF SCIENTIFICS MANU.		3	GAL	

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 6/18/2012

6

Montana ARNG Hazardous Materials Inventory Database: Print Inventory

CONTRACT CARLAGE

Print Inventory

BEST AVAILABLE COPY

Print Inventory Cancel

Unit: DET 1 CO A 1st BN 163D Storage: SUPPLY RM Month: IN 1/1/2012

5LN	Item	NSN	Manufacturer		Quantity	Unit of Issue	Shelf Life	нсс
	A-33 DRY		ECOLAB	*	1	2.18 LBS		
	AJAX CLEANSER WITH CLORINE BLEACH		COLGATE/ POLMALIVE		3	21 OZ		
	AJAX SOFT CLEANSER		XALA		20	21 OZ		
	AQUATRAZ		FRANKLIN CLEANING TECH		1	5 GAL	-	
	AWARD		AIRCHEM/ECOLAB		1	16.5 OZ		
	BETGO HI TECH FINISH		BETCO		11	GAL		
	BETCO TOILET CLEANER		BETCO		11	1 QT		
	BUFFER ALL		RMC		8	GA		
	CLEAN ALL PURPOSE CLEANER AND DEGREASER		LIGHT HOUSE FOR THE BLIND OF HUSTON		2	22 OZ		1.52
	GOOD SENCE		JOHNSON DIVERSEY	3 9	3	14 OZ		
	GOOD SENCE TUFF	8	SC JONSON WAX		1	14 OZ		

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 6/18/2012

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1377 of 1990

1 450 2 01 4

Montana ARNG Hazardous Materials Inventory Database: Print Inventory BEST AVAILABLE COPY

HI-LEX BLEACH		KIK INTER.	4	GAL
HORIZON 400		JOHNSON PROFESSIONAL	1	GAL
PENETREM		TREM CO	1	5 GAL
POWER TIME		RMC	4	GAL
QUICKSOLVE		XALA	13	32 OZ
RENOWN FLOOR CLEANER		AMSAN	3	GAL
RENOWN SPECIAL GLASS CLEANER	¥_	AMSAN	4	GAL.
SIMPLE GREEN		SUNSHINE MAKERS	3	24 OZ
SUNBONNET LEMON WAX		BUTCHERS	6	18 OZ
SUPER GREEN	7930-01-306-8369	NEW GEN. TECH	5	GAL
VANSOL		NATIONAL LAB	5	1 QT

Page 1378 of 1990

Montana ARNG Hazardous Materiais inventory Database. 1 min montory

BEST AVAILABLE COPY

Print Inventory

Print Inventory Cancel

Unit: DET 1 CO A 1st BN 163D	Storage: SUPPLY RM	Month:
IN	2	1/1/2012

SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
	A-125 DRY		ECOLAB		1.	S GAL		
	AJAX CLEANSER WITH		COLGATE/ POLMALIVE		1	21 OZ		
	BECO EXPRESS 1 STEP		BECO CORP.		1	GAL		
<u>.</u>	BUFFER ALL		RMC		2	1 gal		
9 - 11 	LIGHTNING		DIAMOND PROD.		1	GAL		1000
	PLEDGE	×.	SC JONSON WAX		2	1 LBS		1
	POLMALIVE DISH WASHING SOAP		COLGATE/ POLMALIVE		1	25 FLOZ		
	QUICKSOLVE		THOMPSON HAYWARD CHEM.		1	32 OZ		
	ROYAL SHEILD		ACE		1	GAL		
	SURE PAC	7930-01-481-1104	ECOLAB		1	45 OZ		

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 6/18/2012

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1379 of 1990

....

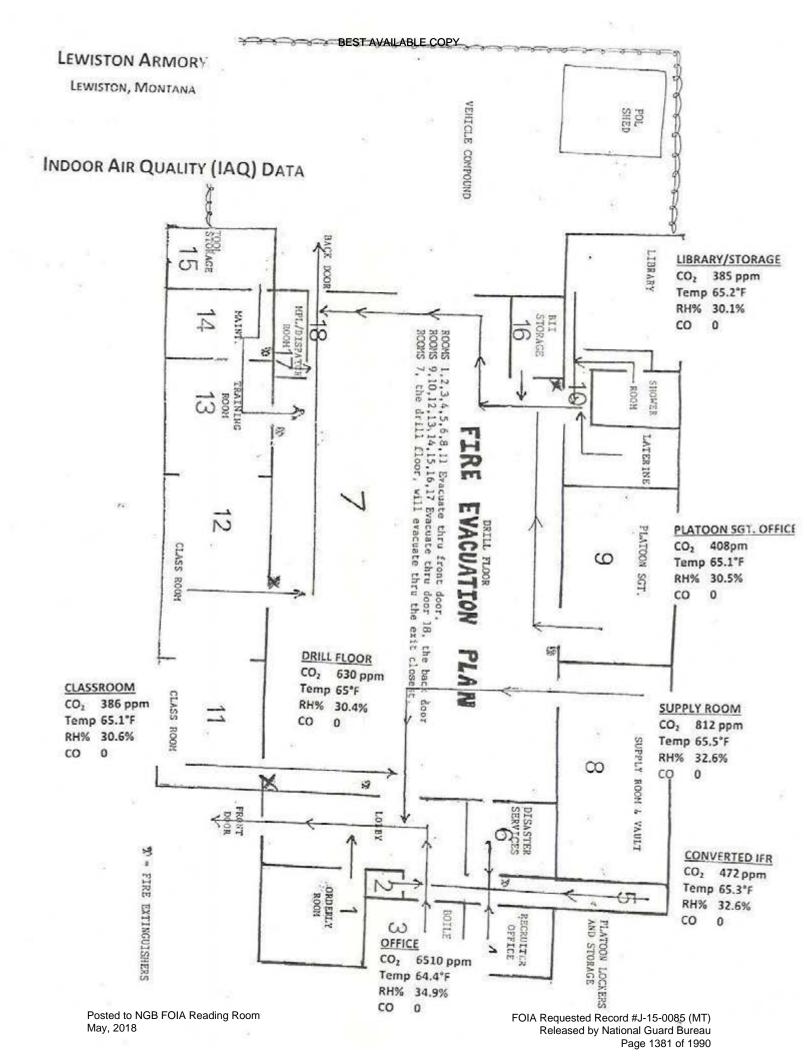
ILLUMINANCE SURVEY LEWISTOWN ARMORY LEWISTOWN, MONTANA OCTOBER 4, 2012

249

Building	Location	Light - FC*	Minimum lighting requirements – FC
Armory	Office at desk top	201	50
Armory	Drill Floor	62.8	30
Armory	Supply Room	59.8	30
Armory	Platoon SGT Office	103.1	50
Armory	Classroom	167.7	50
Armory	Converted IFR	55.6	30
Armory	Library	73.4	50
Armory	Recruiter Office	109.6	50

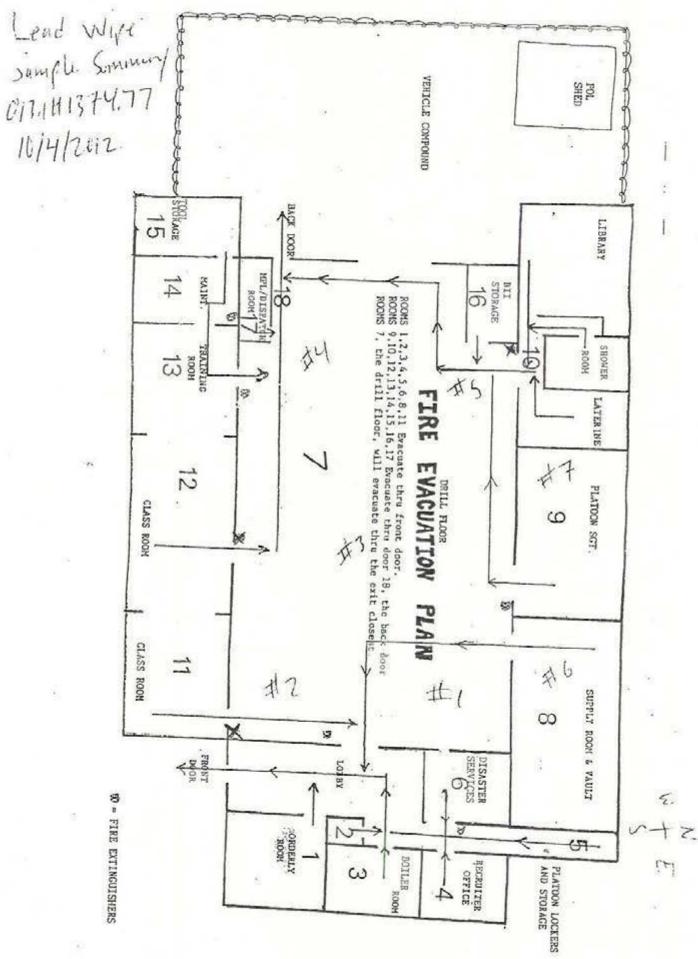
*FC = foot candle measurement

Posted to NGB FOIA Reading Room May, 2018



ead Wire Sumple BEST AVAILABLE COPY 0.77 ummury -Sample # 0412-cevistown-01 location DAll Floor, NC SE Centur -02 -03 NW -64 -05 Converted IEK -06 Converted -07

.



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1383 of 1990 Name:

BEST AVAILABLE COPY Date:

NES Job Number:

013.141374.77

2014/2012

IAQ Data

Building	Location	CO2	Temp	RH %	со
Armony	Office	651	. 64.4°F	34.9	Ô
	Dril Floor	630	GS'F	30.4	0
	Sopply	812	65.5°F	32.6	0
	Platoon Sgt.	408	65.1°F	3015-	0
-	Classroom	386	65.1°F	30:6	0
	Library/ Storage	3B5	65,2°F	30,1	0
\checkmark	Convertes IFX	472	65.3.F	32.6	0

OUTDIVK LOZ = 370

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1384 of 1990

Name:

BEST AVAILABLE COPY Date:

1014

NES Job Number:

B13.1H1374.71-

Light Survey

2012

Building	Location	Light - ft/c
Armony	Office @ nesk	201 FHC
1	Drill Floor	62.5 Ft/c
	Supply Roan	59.8 \$1/L
	Platoon St. Office	1031 Ft/c
	Classinon	167.7 Fulc
	Converted IFR	55.6 F1/2
	Library	18 73.4 erk
	Renter Office	109,6 F1/c
	_	
V		

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal	2 Duri LEOD
floor surfaces)	01-05
Are any weapons cleaned in the facility, if yes where are they cleaned?	Avill Floor
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	06-07
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	Yes, now a locen voor. Storage
Is there any peeling paint? Take bulk sample if able.	No No
Are there any signs of water damage or mold?	Bassible Damage to Converted ICR
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	Buit 1963-NO Achestos
Quality of housekeeping	Great
HVAC maintenance plan in place?	Stater
Overall condition of HVAC system	YES RODEN
Obtained CO2, Temp, RH monitoring	Attricket
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	I flam locker, I shed outdoors

Fire alarm in working conditionnot usually in place in older armories	NO ha Hlarm
Fire extinguishers in place and properly identified and mounted	5
Evidence of monthly fire extinguisher inspections	7
Annual fire extinguisher inspections tags current	The act 2012
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	NIA
Egress routes accessible and properly markednoted on Fire Evacuation Plan	
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	Hatten - Henny Consuration
Any Photo labs	NIA
Any hazardous noise sources	N/19
Light levels checked throughout building	1 Apailie
Breaker panels properly labeled with no exposed wiring	J
Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.?	DA 3, 1 state Dabaty, Runier
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	Not commity
Obtain two lead air samples	9 H - Day training Schedt - Once zumme On IHSW Request Only Summe

Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	N/A No Kitche
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	NIA J
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	Water / Flowling - Spring time - sing yourp work isoder in at state level
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	
Name of Armory, POC, phone #, address and organizations in Armory	Lewistown Armory Non-Responsive





TSI - Customer Service report

Sold-to party

Thank you for the opportunity to service your instrument.

RMA Number: 800235189

5180406

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

Ship-to party

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

5180406

Service Information: Purchase Order Purchase Order Date



Calibration of VelociCalc Plus 8386A Description

VELOCICALC Plus Air Velocity Meter 57602 Equipment Serial Number 54110581 8386A Material

Service Description:

Return Reason: CALIBRATION OVERDUE

Findings:

Unit sent in for clean and calibration. The unit passed as found.

Action:

The unit was cleaned, calibrated, and a complete operational checkout

was performed.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1389 of 1990

ENVIRON	MENT C	ONDITION								8386A	
TEMPERA	TURE		68 4 (20.2)	°IF (°C')		IVIC	ODEI.			0300A	
RELATIVE	HUMIDIT	٣	36	%811		Con Norman			54440594		
BAROMET	ETRIC PRESSURE 28.61 (968.8) inHg (hPa)					54110581					
130131	s Left s Found				ד או 🕼 סיד או		iance 'Olerance				
		- C A L	IBRATI	ONVE	C R I	F I	сатіо	NR	ESULT	s –	
VELOCITY VERIFICATION SY							STEM V-106			Unit: ft/min (m/s	
# STAN	DARD	MEASURED	ALLOWABL	ALLOWABLE RANCE		ST	ANDARD	MEAS	URED	ALLOWABLE RANGE	
1 0(0	.00)	0(0.00)	-3-1 (-0.0	-3-3 (-0.02-0.02)		64	3 (3.26)	640 (.	3.2.5)	623~662 (3.17~).36)	
2 34(0.17)	35 (0.18)	3137 (0.1	3137 (0.16-0.19)		99	05 (5.06)	991 (3	5.03)	965~1025 (4.90~5.21)	
3 64 (0.32)	64 (0.32)	61-67 (0.3	61-67 (0.31-0.34)		14	68 (7.45)	1476 (7.50)	1423-1512 (7.23-7.68)	
4 99(0.50)	99 (0.50)	96~102 (0.4	96~102 (0.49~0.52)		248	81 (12.60)	2463 (2.51)	2406~2555 (12.22~12.98)	
	(0.81)	1.59 (0.81)	the second s	155-164 (0.79-0.84)		450)1 (22.87)	4440 (3	22.55)	4366~4636 (22.18~23.55)	
	(1.67)	325 (1.65)	318-338 (1	318-338 (1.62-1.72)		800	00 (40,64)	7943 (4	10.35)	7760-8240 (39.42-41.86)	
TEMPER	ATURE	VERIFICATION			S	vsti	EM T-119			Unit: °F (°C	
# STAL	NDARD	MEASURED	ALLOWAR	LE RANGE	11	S	TANDARD	MEAS	URED	ALLOWABLE RANGE	
1 32.0	(0.0)	32.1 (0.1)	31.5-32.5	(-0.3-0.3)	2	14	140.0 (60.0) 139.		(59.9)	139.5~140.5 (59.7~60.3)	
PRESSU	RE VERI	FIGATION			S	VSTI	EM V-106			Unit: inH ₂ O (Pa	
# STAL	NDARD	MEASURED	ALLOW	VABLE RANG	E	1	STANDARD MEASURED		EASURED	ALLOWABLE RANGE	
	.073	-4.084 (1016.9)		5.61002.8		3	8.027(1998	8.027 (1998.7) 8.074 (201		7.942-8 112 (1977 5-2020.0	
	(506.0)	2.041 (508.2)	and the second second	57 (499,7-51		1	14.052 14.114 (3498.9) (3514.4)			13.906-14.198 (3462.7-3535.2)	
HUMID	ITY AS	FOUND			S	YSTI	EM H-102			Unit: %R	
	NDARD	MEASURED	ALLOW	ABLE RANGE	:	#	STANDARD	MI	ASURED	ALLOWABLE RANGE	
and a second second	10.0	11.8	7.	0~13.0		4	70,0		69.1	67.0-73.0	
2	30.0	30.6	27	.0-33.0		5	90.0		89.4	87.0~93.0	
	50.0	49.9	47	.0-53.0				1	- manual		

Measurement Variable DC Voltage	System ID E004477	Last Cal. 12-15-11	Cal. Due 12-13-12	Measurement Variable Temperature	System ID ED01644	Last Cal. 01-20-12	Cal. Due 07-20-12
Pressure	E001558	12-12-11	06-12-12	Pressure	E001560	12-12-11	06-12-12
Velocity	E003327	09-19-07	09-19-12	Barometric Pressure	E001992	04-08-11	04-08-12
Temperature	E001800	01-19-12	07-19-12	Temperature	E001799	01-19-12	07-19-12
Humidity	E003539	02-28-12	03-28-12				

Non-Responsive

March 27, 2012

DATE

DOC 10 CERT_DEPAULT

SLP/N 23

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1390 of 1990 CERTIFICATE OF CALIBRATION AND TESTING

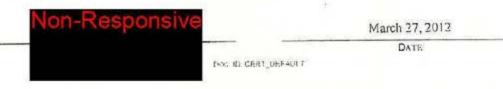
TS1 Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

	IRONMENT CO	NUTTON				M	DDEL		8386A	
TEM	PERATURE	- Wester Street	69.1 (20.6)	°F (°C)						
REL	ATTVE HUMIDIT	Y	37	37 %RH		SERIAL NUMBER			54110581	
	OMETRIC PRESS	and the state of t	28.61 (968.8)	infig (hPa)						
-	As LEFT									
	AS FOUND						OLERANCE			
		- C A 1	LIBRAT	ION V	E R 1	FI	CATION	RESULT	and the second se	
Tes	PERATURE S	ERIFICATION	×		S	YST	EM T-119		Unit: °F (°C,	
1	The second				#	S	TANDARD	MEASURED	ALLOWABLE RANGE	
1	32.0 (0.0)	32.1 (0.1)		31.5-32.5(-0.3-0.3) 2			0.0760.0)	139.8 (59.9)	139,5-140,5 (59,7-60,3)	
PRI	ESSURE VERI	FICATION			S	YST	EM V-106		Unit: inH2O (Pa	
# STANDARD MEASURED ALLOWABLE RANG		GE	1	STANDARD	MEASURED	ALLOWABLE RANGE				
1	-4.073 (-1014.2)	-4.084 (-1016.9)	-4	-4.1194.027 (-1025.61002.8)		3	8.027 (1998.)	7) 8.074 (2010.4)	7,942-8.112 (1977.5-2020.0	
2	2,032 (506.0)	2.041 (508.2)		2.007~2.057 (499.7~512.3)		4	14,052 (3498.9)	14.114 (3514.4)	13.906-14.198 (3462.7-3535.2)	
H	MIDITY VERI	FICATION			S	YST	Ем Н-102		Unit: %RI	
#1	STANDARD	MEASURED	ALLON	VABLE RANG	E	Ħ	STANDARD	MEASURED	ALLOWABLE RANGE	
1	10.0	11.8	And I Real Property lines in the local division of the local divis	7.0~13.0		4	70.0	69.1	67.0-73.0	
2	30.0	30.6	1 3	27.0-33.0		5	90.0	89.4	87.0~93.0	
3	\$0.0	(0, 0)h	-	7.0~53.0						
Ve	LOCITY VER	FIGATION			S	YST	EM V-110		Unit: ft/min (m/s	
#	STANDARD	MEASURED	ALLOWAR	LE RANCE	#	S	TANDARD	MEASURED	ALLOWABLE RANGE	
1	0(0.00)	0 (0.00)	and the second se	.02~0.02)	7	6	48 (3.29)	646 (3.28)	629-667 (3.19-3.39)	
2	35(0.18)	34 (0.17)	32-38 (0	.16-0.19]	8	9	96 (5.06)	997 (5.06)	966-1025 (4.91-5.21)	
3	64 (0.33)	64 (0.32)	61-67 (0	.31~0.34)	9	1	476 (7.50)	1476 (7.50)	1432-1521 (7.27-7.72)	
4	99 (0.50)	99 (0.50)	and the second se	0.49-0.52)	10	24	76 (12.58)	2472 (12.56)	2401-2550 (12.20-12.95)	
5	160 (0.81)	159 (0.81)	155-165 (0.79~0.84)	11	4-	98 (22.85)	*4548 (23.10)	4363-4633 (22.17-23.54)	
		346 (1.76)	335-356 (and the second se	12		88 (40.58)	8013 (40.71)	7748-8227 (39.36-41.80)	

Temperature	E001800	01-19-12
DC Voltage	E004477	12-15-11
Pressure	E001558	12-12-11
Velocity	E003327	09-19-07
Humidity	E003539	02-28-12
Temperature	E004402	12-08-11
Pressure	E001721	12-13-11
Velocity	E003327	09-19-07

Cal. Due	Measurement Variat
07-19-12	Temperature
12-15-12	Temperature
06-12-12	Pressure
09-19-12	Barometric Pressure
08-28-12	DC Voltage
06-05-12	Pressure
05-13-12	Barometric Pressure
09-19-12	

equire	ements of ISO	10012:2005.	
able	System ID E001799	Last Cal. 01-19-12	Cal. Duc 07-19-12
	E001644	01-20-12	07-20-12
160	E001560	12-12-11	06-12-12
re	E001992	04-08-11	04-08-12
25.5	E001658	06-28-11	12-28-13
	E001719	12-13-11	06-13-12
re	E001992	04-08-11	04-08-12



Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1391 of 1990



Service Solutions

Certificate of Calibration

6209119 Certificate Page 1 of 1

Instrument Identification

Non-Respons

Company ID: 607229 INDUSTRIAL HYGIENE SW

10510 SUPERFORTRESS AVE SUITE MATHER, CA 95655

Instrument ID: H225438 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 00279029

PO Number:

Certificate Information

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE Procedure: MINOLTA T-1M ILLUMINANCE METER Technician Non-Responsive

Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C Humidity: 43.0 %

Remarks:

Tektronix Service Solutions certifies the performance of this instrument has been verified using equipment of known accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the International System of Units (SI), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL Z540.1-1994. The quality system is registered to ISO9001.

This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

Approved By: NG Service Representation

Non-Responsiv

Calibration Standards

NIST Traceable#	Inst. ID#	Description	Manufacturer	Model	Cal Date	Date Due
1700230826	17-1001076	6 STEEL RULE	STARETT	C416R-72	10Jun2010	10Jun2012
1700276206	17-2007214	1000W LIGHT BULB	CPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
1700201473	4083RC	MULTIMETER	FLUKE	8842A	25Jul2011	25Ju/2012
1700201472	461952	CURRENT SHUNT	LEEDS & NORTHRUE	4360	09Aug2011	09Aug2012

6120 Hanging Moss Road - Orlando, FL 32807 - Phone: 800-438-8165 - Fax: 407-678-4854



Service Solutions

DATASHEET

Manufacturer: Minolta

Model: TL-1

Workorder #: 602492

Procedure: Manufacture

Description: Illuminance Meter

Date: 22-May-12

Range	Nominal Value	As Found	Result	As Left	Result	Min	Max
30fC (resolution: .1 fC)	10.00	10.1	Ρ	10.1	P	9.7	10.3
300 fC (resolution: 1 fC)	100.0 1000.0	100.1	P	100	P	97 970	103 1030

Note: Measurement Uncertainty = +/- 2.4% of Indication.

Page 1 of 1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1393 of 1990 5 6

CRO PRECISION

MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 (530) 266-1860

Certificate of Calibration

Date: Nov 20, 2012

Cert No. 2008120221675

Customer: NETWORK ENV	a second s				
1141 SIBLEY ST FOLSOM CA 950			Work Order #:	SAC-7004499	and the second
		A Barriston	Purchase Order #:	013.IH1374.00	ale a
MPC Control #:	CD3921	a car -	Sedal Number:	51380	. services the
Asset ID:	1245	S. S. Call Strands, S. C.	Department:	N/A	
Gage Type:	IAQ METER		Performed By:	Non-Responsive	The said of
Manufacturer:	TSI		Received Condition:	IN TOLERAINCE	and a
Model Number:	8551	A State and the second	Returned Condition:	IN TOLERANCE	Sale To
Size:	N/A	Share and the state	Cal. Date:	November 19, 2012	· · · · ·
Temp/RH:	68.9°F / 35.6 %		Cal, Interval:	12 MONTHS	
The second		The state of the	Cal. Due Date:	November 19, 2013	1. Sugarthe

Calibration Notes:

Standards Used to Calibrate Equipment

LD.	Description.	Model	Serial	Manufacturer	Cal. Due Date	Traceability #
CC8185	MULTIFUNCTION PROCESS	726	1355148	FLUKE	Nov 5, 2013	2008120211043
J2270	CALIBRATOR LASER PARTICLE COUNTER	200L-1-115-1	90058761A	METONE	Apr 30, 2013	2008120175502
and the second	a series and a series and a series of the	10. 20. 20. 30	and the state of the	and the second second	·	

Procedures Used in this Event

Procedure Name Description
PARTICLE COUNTERS
971 TEMP/HUMIDITY METER FLUXE) 971

Collibration Technician

on-Responsi

QC Approval:

Calibrating Technician:

The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multipled by the coverage factor kwz, which for normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in according to a coverage factor kwz, which for normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in according to a coverage factor kwz, which for normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in according to a coverage with ISO 17025/2005, ISO 9001 2008, ANSINCSL 2540-1, WFC Quelty Maruel, MPC QSO and with customer purchase offer instructions.

Calibration cycles and resulting due dates were submitted/approved by the customer. Any number of factors may cause an instrument to drift out of tolerance before the next scheduled calibration. Recalibration cycles should be based on troquency of use, environmental conditions and sustainer's existilished systematic accuracy. The information on this report, persistenenty in the instrument Mertified.

All standards are traceable to SI through the National Institute of Standards and Technology (NSST) and/or recognized national or international standards laboratories. Services reinformed include prope manufacturer's services instruction and are warranted for no less than thirty (30) days. This report may not be reproduced in part or in a whole without the prior writtee approval of the Issuing NPC lab.

Page 1 of 1

(CERT, Rev 3)

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1394 of 1990

TABLE 1 LEAD WIPE SAMPLE RESULTS LEWISTOWN ARMORY LEWISTOWN, MONTANA OCTOBER 04, 2012

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard
10412-Lewistown-01	Drill Floor	Southwest corner of drill floor, floor area sample	5.1	40 μg/ft ²
10412-Lewistown-02	Drill Floor	Northwest corner of drill floor, floor area sample	2.7	40 µg/ft²
10412-Lewistown-03	Drill Floor	Center, middle of drill floor, floor area sample	<2.5	40 μg/ft²
10412-Lewistown-04	Drill Floor	Northeast corner of drill floor, floor area sample	<2.5	40 μg/ft²
10412-Lewistown-05	Drill Floor	Southeast corner of drill floor, floor area sample	9.6	40 µg/ft²
10412-Lewistown-06	Converted IFR	Floor sample from the north area of room	29	200 µg/ft²
10412-Lewistown-07	Converted IFR	Floor sample from inside storage locker, south end of converted IFR (previous area where the bullet trap was located in the IFR)	440	200 µg/ft²

µg/ft² = micrograms per square foot

ARNG = Army National Guard



BEST AVAILABLE COPY ANALYTICAL REPORT

Report Date: October 15, 2012

Non-Responsiv

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630 Phone: (916) 353-2370 x 20 Fax: (916) 353-2375



Workorder: 34-1228520 Client Project ID: 013.IH1374.77/Lewiston, MT Purchase Order: 013.IH1374.77 Project Manager: NoteResponsive

Analytical Results

Sample ID: 10412-Lewiston-01 Lab ID: 1228520001	Media: Ghost Wipe Sampling Location: Lewiston, MT Sampling Parameter: Area 1 ft ^a			Collected: 10/04/2012 Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/11/2012 Analyzed: 10/12/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	5.1	5.1	2.5	

Media: Ghost Wipe			Collected: 10/04/2012
Sampling Location: Lewiston, MT Sampling Parameter: Area 1 ft ²			Received: 10/11/2012
			Prepared: 10/11/2012 Analyzed: 10/12/2012
ug/sample	ug/ft ^a	RL (ug/sample)	
2.7	2.7	2.5	
	Sampling Locati Sampling ug/sample	Sampling Location: Lewiston, N Sampling Parameter: Ar ug/sample ug/ft ^a	Sampling Location: Lewiston, MT Sampling Parameter: Area 1 ft ² ug/sample ug/ft ² RL (ug/sample)

Sample ID: 10412-Lewiston-03	Media: Ghost Wipe			Collected: 10/04/2012
Lab ID: 1228520003	Sampling Location: Lewiston, MT			Received: 10/11/2012
Method: NIOSH 7300 Mod.	Samplin	g Parameter: Ar	èa 1 ft²	Prepared: 10/11/2012 Analyzed: 10/12/2012
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	All and a state of the state of
Lead	<2.5	<2.5	2.5	

Sample ID: 10412-Lewiston-04	Media: Ghost Wipe Sampling Location: Lewiston, MT Sampling Parameter: Area 1 ft ²			Collected:	10/04/2012
Lab ID: 1228520004				Received:	10/11/2012 10/11/2012 10/12/2012
Method: NIOSH 7300 Mod.					
Analyte	ug/sample	ug/ft ²	RL (ug/sample)		eran. Jaus
Lead	<2.5	<2.5	2.5		

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, USA 84123 PHONE +1 801 266 7700 FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Laboratory Group A Campbell Brothers Limited Company

www.alsglobal.com

BIGHT SOLUTIONS DICHT PARTNER

Page 1 of 3

Posted to NGB FOIA Reading Room May, 2018 Mon. 10/15/12 10:41 AM BEST AVAILABLE COPY IHREP-V10.9

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1396 of 1990



ANALYTICAL REPORT

Workorder: 34-1228520 Client Project ID: 013.IH1374.77/Lewiston, MT Purchase Order: 013.IH1374.77 Project Manager: Northesponsed

Sample ID: 10412-Lewiston-05	Me	Collected: 10/04/2012		
Lab ID: 1228520005	Sampling Location: Lewiston, MT Sampling Parameter: Area 1 ft ²			Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/11/2012 Analyzed: 10/12/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)	A Second Second
Lead	9.6	9.6	2.5	

Sample ID: 10412-Lewiston-06	Media: Ghost Wipe Sampling Location: Lewiston, MT Sampling Parameter: Area 1 ft ^a			Collected: 10/04/2012
Lab ID: 1228520006				Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/11/2012 Analyzed: 10/12/2012
Analyte	ug/samplo	ug/ft ²	RL (ug/sample)	
Lead	29	29	2.5	

Sample ID: 10412-Lewiston-07	Media: Ghost Wipe Sampling Location: Lewiston, MT			Collected: 10/04/2012
Lab ID: 1228520007				Received: 10/11/2012
Vethod: NIOSH 7300 Mod.	Samplin	g Parameter: An	ea 1 ft²	Prepared: 10/11/2012 Analyzed: 10/12/2012
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	
Lead	440	440	2.5	

Report Authorization

Method	Analyst	Peer Review	20101230000
NIOSH 7300 Mod.	Non-Responsive	Non-Responsive	

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com

Posted to NGB FOIA Reading Room May, 2018 Mon, 10/15/12 10:41 AM

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1397 of 1990



ALS

Workorder: 34-1228520 Client Project ID: 013.IH1374.77/Lewiston, MT Purchase Order: 013.IH1374.77 Project Manager: Monte Constants

General Lab Comments

The results provided in this report relate only to the items tested. Samples were received in acceptable condition unless otherwise noted. Samples have not been blank corrected unless otherwise noted. This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP) Utah (NELAC) Nevada Oklahoma Iowa Florida (TNI) Texas (TNI)	ADE-1420 DATA1 UT00009 UT00009 IA# 376 E871067 T104704456-11-1	http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/bsdwllabservice.htm http://www.deq.state.ok.us/CSDnew/ http://www.iowadnr.gov/linsideDNR/RegulatoryWater.aspx http://www.dep.state.il.us/labs/bars/sas/qa/ http://www.tceq.texas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.crg
Lead Testing: CPSC Soil, Dust, Paint ,Air	ACLASS (ISO 17025, CPSC) AIHA (ISO 17025, AIHA ELLAP and NLLAP)	ADE-1420 101574	http://www.aclasscorp.com http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

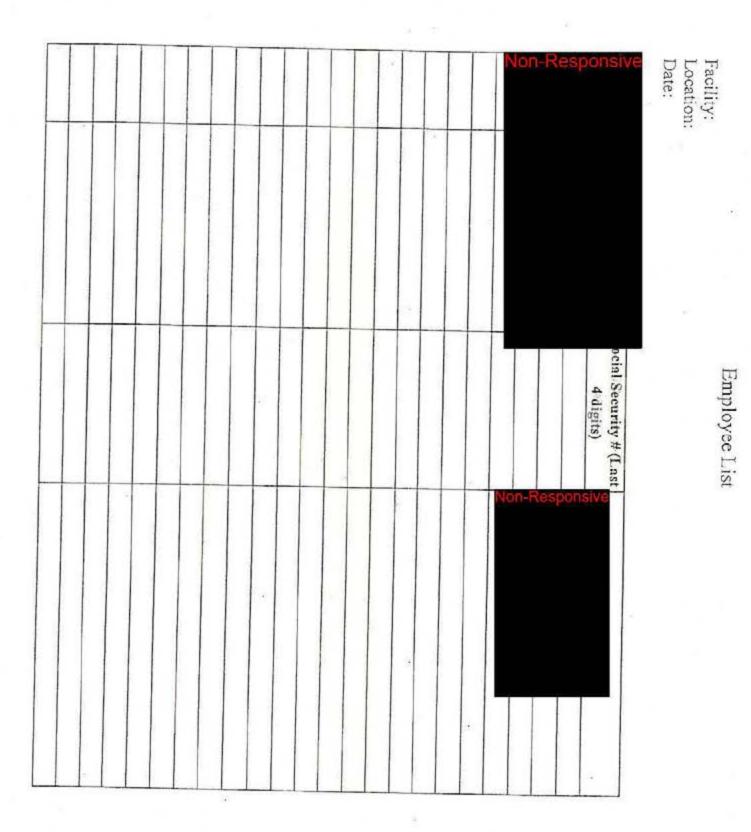
" No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

IHREP-V10.9

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1398 of 1990



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1399 of 1990

1	0	12	2	
6	1	-	P	
		50	Ŧ	
×.	1	1	0	
	10	100	•	

Industrial Hygiene, Southwest Hazard Inventory Log Lewistown Armory - MT 59457

CONTROL					ARTICLE CONTRACTOR AND	1 20203-000			
CLOSED [X]	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	SUSPENSE	ACTION	Estimated Cost(s)	DATE	REFERENCES
MILA-100412-4.1	High levels of lead above the Army National Guard standards.	Armony - Converted IFR	3	Clean entre Converted Indoor Firing Range area where high leves of lead were found. Review and utilize the lead clean-up SOP before deaming the area					29 CFR 1910 10208
MTLA-100412-4.3	Water damage/ flooding/ standing water in building	Armory - Converted IPR	ω	Get Converted IFR area evaluated to determine what is allowing water seepage into this area. Acquire a sump pump to remove standing water from the converted IFR, if needed.					Prodent Industrial Hygiene Practices dested Record
MTLA-100412-4.4	No asbastos documentation localid at the facility,	Armory	C2	Consult with a Montana state-certified asbestos inspector to inspect the facility for any asbestos containing material. If there is ACM located at the Lewistown Armory, an asbestos Operations & Maintenance Plan should be written and communicated to employees.	-		-		29 CFR 1910.1001(b)
EST AVAILABLE COPY									

Posted to NGB FOIA Reading Room May, 2018

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Lewistown Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Findings and Recommendations; Item 2 – Painted Surface Evaluation).

N4.1 Lead Wipe Sampling – Clean areas of converted indoor firing range where high levels of lead dust were detected during the inspection. Clean areas thoroughly by referring to the lead clean-up SOP found in Appendix P.

N4.3 Water Damage and limited Visual Fungal Growth Evaluation – Acquire a sumppump to remove standing water after flooding into the converted indoor firing range.

N4.4 Asbestos Documentation – Documentation should be obtained as to whether or not there is asbestos located in the building. A contactor should be used to see if materials in the building contain asbestos. If there is asbestos in the building, then an operations and maintenance plan should be written for the facility.

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Samples 10412-Lewistown-01, 02, 03, 04, 05.	
Are any weapons cleaned in the facility, if yes where are they cleaned?	Yes weapons are cleaned on the Drill Floor.	
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Samples 06 and 07 were collected from the converted IFR.	
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	Samples 06 and 07 were collected from the converted IFR which now is a locker room.	
Is there any peeling paint? Take bulk sample if able.	No.	
Are there any signs of water damage or mold ?	Employees stated that the converted IFR periodically floods during the spring time due to possible poor irrigation from building.	
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	Possible ACM in flooring.	
Quality of housekeeping	Great.	
HVAC maintenance plan in place?	Yes through the state.	
Overall condition of HVAC system	In proper working condition.	
Obtained CO2, Temp, RH monitoring	Attached to report.	
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	Attached to report.	
HAZMAT storage, Condition of lockers, f outside storage building is used is it ventilated and does it meet OSHA standards.	Inspected with no incompatibilities found.	

Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	N/A. No kitchen.
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	N/A. No high noise areas monitored.
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	Done
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	Done
Name of Armory, POC, phone #, address and organizations in Armory (Add Checklist to Report)	RR2 Lewistown Non-Responsive 406-324-5595 863 Airport Road Lewistown, MT
	(Add Checklist to Report)

11 Installation Status Report (ISR) Services Documentation	Intellicode	01	02	03	04 Annual
eathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04			-	>
eathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04				
imber of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05				
Imber of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05				
imber of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06				
Imber of Noise Sound Level samples collected >= 140 dBP	953-01-06				
Imber of Noise Sound Level samples collected >= 140 dBP not controlled, that are commended for control	953-01-07				> <
imber of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07				5 0
Imber of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not introlled that are recommended for control	953-01-08				c
Imber of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not					0
INDIAD	000001000				0
commended for control	953-01-09				5
Imber of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09				
Ital Sumber of DOEHRS-IH shops coded as Priority 1 which have at least one task rformed in the past 12 months	953-02-10	H			
Ital Bumber of DOEHRS-IH shops coded as Priority 1	953-02-10	HT			
Inter of buildings for which all processes requiring a basic industrial hygiene aracterization have received one within the last 12 months	953-02-11	IHT			
Inthe of buildings requiring a basic industrial hygiene characterization within the last 12 onths	953-02-11	Ŧ			
Imber of buildings for which all processes requiring a basic industrial hygiene aracterization have received one within the last 12 months	953-02-12	Ħ			
imber of buildings requiring an industrial hygiene exposure assessment within the last 12 onths	953-02-12	Ę			
imber of processes that were assessed for potential inhalation exposure to employees ring this IH Visit	953-02-13	독			
upper of processes that require an assessment for potential inhalation exposure to ployees during this IH Visit	953-02-13	IHT			

Posted to NGB FOIA Reading Room May, 2018

0	IHT	953-02-20	plicable to occupational health concerns
0	IHT	953-02-20	pliceble to occupational health concerns
0		953-02-19	umber of ventilation systems which were evaluated by an IH
0		953-02-19	umber of ventilation systems which require corrective action based on deficiencies identified uring an IH survey
0		953-02-18	unter of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require spection and measurement of airflow rates
0		953-02-18	spected and measured for airflow rates
	IHT	953-02-17	thin the last 12 months.
	IHT	953-02-17	quantify their daily noise exposures within the last 12 months.
	IHT	953-02-16	sound level meter within the last 12 months.
	耳	953-02-16	umber of processes which have been measured for potential hazardous noise levels with a und level meter within the last 12 months.
	IHT	953-02-15	onths.
	IHT	953-02-15	umber of personnel who were reassessed by industrial hygiene within the last 12 months.
	IHT	953-02-14	nployees within the last 12 months.
	IHT	953-02-14	thin the last 12 months.



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam + Hawaii + California + Oregon + Washington + Nevada + Arizona + Idaho + Utah + Wyoming + Montana + New Mexico + Nebratka

Industrial Hygiene Site Assistance Visit

and off they is contracted to officiate in a probable of military periods were situated and benchlancy to ensure all military operations and uprocedures are considered in a beautity manuar

Libby Armory Closed Indoor Firing Range (Closed IFR) 1004 Treasure Ave Libby, MT 59923 23 May 2014

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916)

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1406 of 1990



BEST AVAILABLE COPY DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-P

16 JUN 2014

MEMORANDUM THRUNON-Responsive DSS, 1956 Mt. Majo St., Room 1009, Helena, MT 59636

FOR Commander, Libby Armory Closed Indoor Firing Range (CIFR) 1004 Treasure Ave Libby, MT 59923

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Libby Armory -Closed Indoor Firing Range (CIFR) 1004 Treasure Ave Libby, MT on 23 MAY 2014.

1. <u>References</u>. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Libby Armory <u>Closed</u> Indoor Firing Range (CIFR) 1004 Treasure Ave Libby, MT on 23 MAY 2014.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the Industrial Hygiene report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached Industrial Hygienist report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

a. Repair or replace kitchen hood ventilation system. (para. 4.7.2) (RAC 4)

b. RECURRING OBSERVATION: Post warning signage at the entryway(s) of the facility and on Closed

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1407 of 1990

ARNG-CSG-P

BEST AVAILABLE COPY

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Libby Armory Closed Indoor Firing Range (CIFR) 1004 Treasure Ave Libby, MT on 23 MAY 2014

IFR door(s) to warn pregnant or nursing females and children under 7 years of age that there is a
potential for a lead dust exposure in this facility/area. Make sure staff and maintenance personnel are
aware of the associated hazards of lead exposure. (para. 4.1.3) (RAC 3)

c. <u>Continue Acceptable Housekeeping Practices</u> within the armory and utilize Clean-up SOP included in this report to help prevent migration of noted lead dust in this Closed IFR. With each episode of weapons cleaning utilize this same SOP to clean-up afterwards. (para. 4.11.1) (RAC 4)

d. RECURRING OBSERVATION: Prohibit use of the Closed IFR until the area is cleaned of lead below ARNG thresholds. Utilize NGP 420-15 Conversion of Indoor Firing Ranges as a guideline for conversion /Closure. Clean the areas noted to be high with lead dust in this report, and clean in accordance with the Armory Clean-Up SOP accompanying this report. Have <u>follow-up testing</u> conducted to meet acceptable concentrations. (para. 4.1) (RAC 2)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

(1) Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

(2) Corrective measures should be implemented and accomplished at the lowest levels possible. Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

(3) Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

(4) Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

(5) The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

 b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

REFERENCES	29 CFR 1910.1025(h)(1) and NG PAM 420- 15	NGR 385-15, Section 2-3(a) and NG PAM 420-15 (Conversion or Closure IFR)	heral Duty use 5(a)(1) I NG PAM 420-	Fedéral Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations	ARNG-CSG-P Merno Dated 14 November 2013 (ARNG Maintenance Shop Local Exhaust Ventilation Measuremnts)
DATE CORRECTED R	29 191 151 151	N S N O O O	Cla Cla 15	Tei Vol Mo 26, 28,	A C C A A A A A A A A A A A A A A A A A
Estimated Cost(s)					
ACTION		41.000			
SUSPENSE			-		
HAZARD COUNTERMEASURE	Clean the IFR and floor areas exceeding the IHSW clean-up standard in accordance with the IHSW Armory Clean-up SOP to reduce lead concentrations below the 40 ug/ft2 and the 200 ug/ft2 IHSW SOP orterion level.	Indoor firing ranges shall not be used for any purpose other than firing (i.e., they shall not be used for classrooms, exercise rooms, storage, etc.). Close or convert Indoor Firing Range.	Post warning signs on Entryway doors for Potential Lead Dust Exposure to pregnant females, females or of child bearing age and children. Properly close or convert non-active indoor Firing Ranges.	Update all MSDSs for the facility with the new SDS format.	Install ventilation system that draws 850 CFM for turbo charged vehicles.
RAC	N	N	ø	Z	<i>.</i> 0
SITE	<u>FR</u>	IFR	IFR	Armory, Libby, MT	Maintenance Bay
HAZARD DESCRIPTION	The analytical results for lead wipe sampling indicated levels greater than the 40 ug/ft2 criterion or the 200 ug/ft2 criterion specified by the IHSW SOP and the ARNG.	The IFR has not been property cleaned or converted.	The IFR hallway door is kept locked. However, there are not warning signs posted.	MSDS files not updated to current SDS GHS Standard	Both of the exhaust ventilation drop flow rates measured in the maintenance bay did not meet the ARNG minimum recommended requirements for a 500 HP idling engine.
CONTROL NUMBER CLOSED	RECURRING EVENT MTLACIFR- 052314-4.1.1	RECURRING EVENT MTLACIFR- 052314-4,1.2	RECURRING EVENT MTLACIFR- 052314-4.1.3	MTLACIFR- 052314-4.6	MTLACIFR- 052314-4.7.1
b foia r	eading Room		FOIA	Requested Reco	rd #J-15-0085 (MT)

Posted to NGB FOIA Reading Room May, 2018

Page 1409 of 1990

Page 1 of 2

BEST AVAILABLE COPY

Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau

[:]

GUARD *
Semante -
E S
ANRA &

Industrial Hygiene Southwest Violation Inventory Log

SITERACHAZARD COUNTERMEASURESUSPENSEKlichenKlichenDATEDATEVentilation hood or postventilation hood or postPATE4ventilation hood or postoperating instructions indicatingMaintenanceventilation structions indicatingPood.Bay4Install an alarm system on the eyewash stations/delugeAshowershower
<u>}</u>

ï



NATIONAL GUARD BUREAU 111 SOUTH GEORGE MASON DRIVE ARLINGTON VA 22204-1382

ARNG-CSG-P

17 JUNE 2014

MEMORANDUM FOR NOn-Responsive The Adjutant General of Montana, P.O. Box 4789 (1956 Mt. Majo Street), Fort Harrison, MT 59636-4789

SUBJECT: Executive Summary for the Industrial Hygiene Survey of the Armory and Indoor Firing Range (IFR) at 1004 Treasure Avenue, Libby, MT 59923 on 23 MAY 2014

1. Purpose. Industrial Hygiene Southwest Region contracted to have an Annual Industrial Hygiene (IH) survey conducted which would identify, assess, and make recommendations for the reduction or elimination of potential health hazards present in the workplace. This EXSUM provides the most critical recommendations which need to be addressed promptly. The IH Report contains additional findings and recommendations which should be addressed as funding and manpower permit.

2. Findings.

a. The facility had the following high risk level findings:

- There were no Risk Assessment Codes (RAC 1) identified during this Industrial Hygiene Survey.
- There were two Risk Assessment Codes (RAC 2) identified during this Industrial Hygiene Survey.
 - a. The analytical results for lead wipe sampling indicated levels greater than the 40 µg/ft2 criterion or the 200 µg/ft2 criterion specified by the IHSW SOP and the ARNG. Clean the IFR and floor areas exceeding the IHSW clean-up standard in accordance with the IHSW Armory Clean-up SOP to reduce lead concentrations below the 40 µg/ft2 and the 200 µg/ft2 IHSW SOP criterion level. (para. 4.1) (RAC 2)
 - b. The IFR has not been properly cleaned or converted. Indoor firing ranges shall not be used for any purpose other than firing (i.e., they shall not be used for classrooms, exercise rooms, storage, etc.). Close or convert Indoor Firing Range. (para. 4.1) (RAC 2)
- b. The full IH report contains information which can be used in correcting deficiencies, establishing priorities and developing suspense dates.
- c. Some locations were not evaluated during this visit. However, additional IH services can be requested to monitor them for potential health hazards when operations are ongoing.

BEST AVAILABLE COPY

ARNG-CSG-P

CF

SUBJECT: Executive Summary for the Industrial Hygiene Survey of the Libby Armory and Indoor Firing Range, Libby, MT on 23 MAY 2014

3. Recommendations. A risk assessment code (RAC) has been assigned to each health hazard identified in the report. Each type of RAC (health, safety, ergonomic) uses slightly different matrices to determine the overall severity, however a RAC 1 should be considered Critical; a RAC 2 is Serious. Follow all recommendations made in the attached IH survey report, the Violation Log as well as the following recommendations.

a. No RAC 1 hazard(s) were identified at this facility.

4. The technical point of contact is Non-Responsive at (775) 771-3956. For follow up information, contact the Deputy State Surgeon's Office Non-Responsive Non-Responsive t (406) 324-3280.

CFMdNON-Responsive ASO, 20,000 Army Aviation Dr, Reno, NV 89506

CF weed DSS<mark>Non-Responsive</mark>P.O. Box 4789 (1956 Mt Majo Street), Fort Harrison, MT 59630-4703

chier, mausthar Hygiene

Readiness NCO and Building Manager Armory and IFR Non-Responsive 004 Treasure Avenue, Libby, MT 59923



DEPARTMENT OF THE ARMY AND AIR FORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-IHSW

17 June 2014

MEMORANDUM THRU Montana Army National Guard, Deputy State Surgeon (DSS), P.O. Box 4789 (1956 Mt Majo Street, Fort Harrison, MT 59636-4789

FOR Building Manager, Armory and Indoor Firing Range (IFR) – Detachment 1, 639th CSSC, 1004 Treasure Avenue, Libby MT 59923

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Armory and IFR Libby, 1004 Treasure Avenue, Libby, MT conducted on 23 May 2014.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Armory and Indoor Firing Range (IFR), Libby, MT on 23 MAY 2014.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

- a. SSG Amy L. Good, Readiness NCO and Building Manager, went above and beyond expectations to assist the contractor by supplying information for review.
- b. The facility was generally well organized, neat and well kept.
- c. It was apparent the facility personnel were extremely knowledgeable in their roles and responsibilities regarding the Armory.

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Armory and Indoor Firing Range (IFR) Libby, 1004 Treasure Avenue, Libby, MT conducted on 23 MAY 2014.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1 represents the 2.1 located within the contractors report.)

- a. The analytical results for lead wipe sampling indicated levels greater than the 40 µg/ft2 criterion or the 200 µg/ft2 criterion specified by the IHSW SOP and the ARNG. Clean the IFR and floor areas exceeding the IHSW clean-up standard in accordance with the IHSW Armory Clean-up SOP to reduce lead concentrations below the 40 µg/ft2 and the 200 µg/ft2 IHSW SOP criterion level. (para. 4.1) (RAC 2)
- b. The IFR has not been properly cleaned or converted. Indoor firing ranges shall not be used for any purpose other than firing (i.e., they shall not be used for classrooms, exercise rooms, storage, etc.). Close or convert Indoor Firing Range. (para. 4.1) (RAC 2)
- c. The IFR hallway door is kept locked. However, there are not warning signs posted. Post warning signs on Entryway doors for Potential Lead Dust Exposure to pregnant females, females or of child bearing age and children. Properly close or convert non-active Indoor Firing Ranges. (para. 4.1) (RAC 3)
- MSDS files not updated to current SDS GHS Standard. Update all MSDSs for the facility with the new SDS format. (para. 4.6) (RAC 4)
- e. Both of the exhaust ventilation drop flow rates measured in the maintenance bay did not meet the ARNG minimum recommended requirements for a 500 HP idling engine. Install ventilation system that draws 850 CFM for turbo charged vehicles. (para. 4.7) (RAC 3)
- f. The kitchen ventilation hood either did not operate when the switch was thrown or some other action needed to be taken. Either repair the kitchen ventilation hood or post operating instructions indicating how to initiate the ventilation hood. (para. 4.7) (RAC 4)
- g. The eyewash station/deluge shower in the maintenance bay was not equipped with an alarm system. Install an alarm system on the eyewash stations/deluge shower. (para. 4.11) (RAC 4)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW
recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

 Corrective measures should be implemented and accomplished at the lowest levels possible. Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1414 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Armory and Indoor Firing Range (IFR) Libby, 1004 Treasure Avenue, Libby, MT conducted on 23 MAY 2014.

 Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

 Retain entries of the items corrected or closed for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel version of the Violation Correction Log Workbook we have provided.

 The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

 b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

Hazard Assessment/Job Safety Analysis (JSA).

a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit the assessments for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facility's operations. Additional operations can utilize this format to design HAs not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the <u>California</u> Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the <u>Senior Unit Commander of this Facility and any Co-Tenant Organizations, or</u> <u>Units, review and provide assistance with implementation of these recommendations.</u> This will

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Armory and Indoor Firing Range (IFR) Libby, 1004 Treasure Avenue, Libby, MT conducted on 23 MAY 2014.

educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at

Non-Responsive

NGB, IHSW, CIV Industrial Hygiene

Indoor Firing Range

Decontamination and Cleaning Protocol

(Periodic Cleaning and Conversion)

 Ensuring that all procedures listed below comply with all federal, state, and local regulation. Consult with the Regional Industrial Hygiene Office and the States Environmental Office for future guidance.

2. Ventilation System

The range ventilation system must be in operation during all cleaning activities. If no ventilation system is available all doors and windows must keep sealed to prevent contamination of other areas.

3. Materials

- A High Efficiency Particulate Air (HEPA) filtered vacuum system is the preferred method of cleanup. If a HEPA vacuum cannot be obtained a wet method, detailed below, should be utilized. A high-pressured water system or dry sweeping may not be used.
- II. A cleaning solution containing detergent and water is recommended. New solutions of detergent and water should be mixed frequently.
- III. Two containers should be used; one for wetting the applicator (rags, sponge, mop) and the other for rinsing once the dust has been wiped from the surfaces.

- IV. Wastewater in containers can be left to evaporate. Any waste left in the buckets and applicators should be disposed of as hazardous waste. Consult the Environmental Office for appropriate disposal instructions.
- V. Personal responsible for decontamination of the range and stored items be provided with a full face air purifying respirator with a N100 filter or HEPA filter cartridge providing that all requirements for placing employees in respiratory protection have been met as detailed in 29 1910.134. Employees should be provided with protective coveralls with hood and shoe covers (i.e. Tyvex TM full body suite). If cotton coveralls are provided then the employer must provide for laundering of protective clothing. Protective clothing should not be taken home. Prior to leaving the area, personnel should thoroughly HEPA vacuum the clothing to prevent lead dust from leaving the area. Work and street clothing should not be stored together.

4. Order of Cleaning

- A progression of cleaning form top to bottom and from behind the steel backstop to the firing line should be used. All surface areas in the range must be cleaned. Stored items must be decontaminated prior to removal.
- II. After removing the sand/or the steel backstop, areas in front of and behind the bullet trap, along with the steel backstop plates should be cleaned.
- III. The ceilings, lights, baffles, retrieval system, heating system, and ventilation ducts should be cleaned.

- IV. Acoustical material should be vacuumed and removed instead of being painted over. A toxic Characteristic Leaching Procedure (TCLP) test may be used for acoustical material to determine if the material needs to be classified as hazardous and disposed of according lt. The Environmental Office should be contacted regarding this testing.
- V. The floor should be the last surface cleaned starting at the bullet trap and ending behind the firing line, to include the plenum area. Concrete floors should be sealed with deck enamel, or lead paint sealant.
- VI. All walls should be painted, preferably with a lead sealant paint, which will help prevent any leaching of lead after covering.
- VII. Following the wet cleaning of the area and after all surfaces have been allowed to dry thoroughly, a HEPA vacuum should be used on all surfaces, until no dust or residue can be seen. A thorough inspection to detect surface lead dust should be made following cleanup.
- VIII. The Regional Industrial Hygiene Office should be contacted for clearance sampling and to approve the range for converted use.

5. Decontamination of Stored Items

 All stored items must be decontaminated before removing from the range, stored equipment next to the bullet trap and firing line should be decontaminated first.

- II. A HEPA vacuum or wet cleaning method should be used. Every attempt should be made to clean the item before disposing as hazardous waste to reduce cost and waste.
- III. Porous items such as canvas tents or other fabrics may be laundered at companies, which specialize in industrial laundry services. Office partitions and carpeting present during firing should be considered grossly contaminated and disposed of as hazardous waste. Consult the Environmental Office before removing and disposing of items.

6. Medical Surveillance

A pre-placement medical examination is required for all individuals involved with range cleanup operations.

7. Air Monitoring

Worker breathing zone air samples must be collected during range cleanup to ensure that workers are not overexposed and to evaluate clean-up procedures.

8. Hazard Training

A training program must be instituted for all individuals who are subject to exposure to lead at or above the action levels, or for whom the possibility of skin or eye irritations exits. This training should be provided for all personal currently involved in range cleanup operations, at least annually. As required by 29 CFR 1910.1025(I)

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.
- Clean cotton rags and sponges.
- 4. Disposable gloves
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> <u>but check with local Environmental Office.</u>
- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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:

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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. <u>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.</u>

If work is contracted out, a third party should do the clearance sampling.

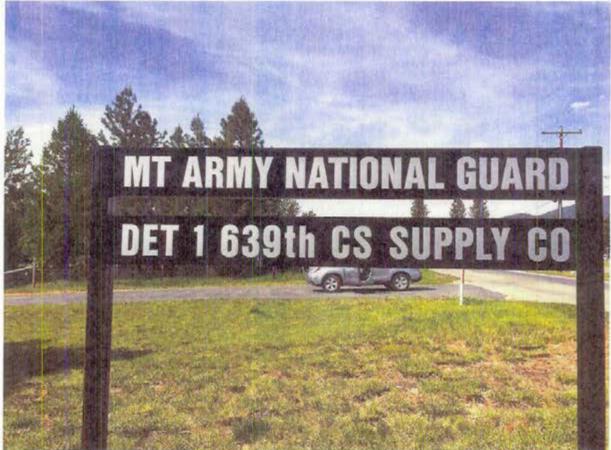
Young children and females who are pregnant, there should be posted signs on all facilities, warning of the potential danger of exposure to lead dust.



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Merico • Nebraska

Industrial Hygiene Site Assistance Visit



Armory, Libby, Montana 1004 Treasure Avenue Libby, Montana 59923

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916) 854-1491

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1425 of 1990 Industrial Hygiene Southwest's mission is to ensure all military personnel and military leadership is provided the specialized technical expertise, consultation and assistance to ensure all military operations and processes are conducted in a healthy manner

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916) 854-1491

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1426 of 1990



INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

DETACHMENT 1, 639TH CSSC Armory 1004 Treasure Avenue Libby, Montana 59923

23 May 2014

Prepared for:

National Guard Bureau Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

Prepared by:

R & R Environmental, Inc. 47 West 9000 South, Suite #2 Sandy, Utah 84070

R & R Job Number: RR-140432-1



Reviewed by:

Prepared by:



R & R Environmental, Inc. Vice President



Environmental Engineer/Scientist

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1427 of 1990

TABLE OF CONTENTS

1.0		ODUCTION	
1000	1.1		
	1.1	Objective	
		Scope of Work	2
2.0	PRO	CESS DESCRIPTION	4
3.0	MET	HODS	5
	3.1	Lead Wipe Sampling	5
	3.2	Painted Surface Evaluation	5
	3.3	Moisture Intrusion and Limited Visual Fungal Growth Evaluation	
	3.4	Asbestos Management	6
	3.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Qua	ality 6
	3.6	Hazard Communication and Hazardous Materials Storage	1111y0 8
	3.7	Ventilation Survey	0 8
	3.8	Personal Noise Dosimetry and Sound-Level Measurements	0 Q
	3.9	Illumination Level Monitoring	0
	3.10	Safety Training and Recordkeeping	9
	3.11	General Safety Walk-Through	0
	3.12	Equipment Used	10
	3.13	Quality Assurance	
4.0	OBSE	RVATIONS AND RECOMMENDATIONS	
	4.1	Lead Wipe Sampling	12
	4.2	Painted Surface Evaluation	13
	4.3	Moisture Intrusion and Limited Visual Fungal Growth Evaluation	13
	4.4	Asbestos Management	13
	4.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Qua	lity 14
	4.6	Hazard Communication and Hazardous Material Storage	14
	4.7	Ventilation Survey	15
	4.8	Personal Noise Dosimetry and Sound-Level Measurements	16
	4.9	Illumination Level Monitoring	17
	4.10	Safety Training and Documentation	17
	4.11	General Safety Walk-Through	18
	4.12	Battery Storage and Charging	18
	4.13	Brake Relining/Changing Operations	18
	4.14	Flammable Storage Cabinets	19
	4.15	Petroleum, Oil, Lubrication Area	19
	4.16	Hazardous Waste Accumulation	19
	4.17	Oily Rags	20
	4.18	Personal Breathing Zone Air Sampling	20
	4.19	Small Arms Cleaning	20
	4.19	Sman rums creating	

5.0	RECURRING OBSERVATIONS
6.0	PROJECT LIMITATIONS
7.0	PROJECT APPROVAL

Appendices:

Appendix A - References

Appendix B - Assessment Criteria

Appendix C - Photo Log

Appendix D - Chemical Inventory

Appendix E - Floor Plan/Illumination Survey/IAQ - Temp, RH, & CO2 Monitoring

Appendix F - Ventilation Data

Appendix G - Field Notes

Appendix H - Calibration Certificates

Appendix I - Metal/Lead Wipe Tables

Appendix J - Laboratory Reports

Appendix K - Employee List

Appendix L - IHSW Violation Inventory Log

Appendix M - Hazard Assessments

Appendix N - Recommendations

Appendix O - DD Forms 2214

Appendix P - Installation Status Report (ISR)

Appendix Q- Facility Information

Appendix R - Safety Related Oberservations

Appendix S - Noise Dosimetry Data

Appendix T - Additional Supporting Documentation

Industrial Hygiene Assistance Visit Det. 1. 639 CSSC Armory Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

EXECUTIVE SUMMARY

During the period of 23 May 2014 **NON-Kesponsive**CSP, Industrial Hygienist, Environmental Engineer, and Environmental Scientist of R&R Environmental, Inc., conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Detachment 1, 639th CSSC Armory, located at 1004 Treasure Avenue, Libby, Montana 59923. The primary point of contact for information gathered during this survey was the Readiness NCO and Building ManageNon-Responsive

The objectives of this III Site Assistance Visit were to:

- Review hazardous material storage and use procedures;
- Review the Respiratory Protection Program and respirator use/storage;
- Collect area and breathing zone air samples;
- Collect metal surface wipe samples;
- · Measure the volumetric flow of local exhaust ventilation systems;
- Monitor sound level measurements;
- Measure illumination levels;
- Collect indoor air quality data;
- Evaluate any existing safety hazards;
- · Review safety policies/programs, training, and record keeping; and
- Conduct Hazard Based Assessments (HA's) and provide supporting monitoring analysis for recommendations.

Significant findings for this IH Assistance Visit can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, workspace locations, regulatory requirements, and additional recommendations.

Commendable: Non-Responsive Readiness NCO and Building Manager went above and beyond expectations to assist R&R Environmental, Inc. by supplying information to review and escorting the hygienist. The entire facility was extremely well organized, neat, and well kept. Additionally, it was apparent was extremely knowledgeable in her role and responsibility and willing to assist.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Posted to NGB FOIA Reading Room May, 2018

Page 1 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1430 of 1990

1.0 Introduction

During the period of 23 May 2014, **NON-RESPONSIVE**CSP, Industrial Hygienist, Environmental Engineer, and Environmental Scientist with R & R Environmental, Inc. (R&R) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Detachment 1, 639th CSSC Armory, located at 1004 Treasure Avenue, Libby, Montana 59923. The Readiness NCO and Building Manager of the facility is **Non-Responsive** phone: 406-324-5270, email: **Non-Responsive** so served as the primary point of contact for information gathered during this survey.

1.1 Objective

The primary goal and focus for the fiscal year 2014 IHSAVs is to be a Hazard Based Evaluation and allow for recommendations as it relates to the processes and activities located at the facility.

The overall purpose of the IHSAV is to identify, measure, and provide recommended methods to control the existence and extent of potentially hazardous operations or conditions at the Army National Guard Facility. The IHSAV is designed to establish baseline and Hazard Assessments (HA's) of workplace and process conditions or update/validate previous baseline/HA so a worker's history of exposures, or potential exposures is provided for each civilian and military employee.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the facility for water damage and the presence of fungal growth;
- Review the asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the configuration of hazardous material storage and use procedures;

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 2 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1431 of 1990

- · Review safety training and record keeping;
- · Measure the volumetric flow of exhaust ventilation systems;
- · Monitor and measure sound level;
- · Measure illumination levels;
- · Evaluate safety hazards with a safety walkthrough; and
- · Review safety policies/programs, training, and record keeping.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana

Posted to NGB FOIA Reading Room May, 2018 Page 3 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1432 of 1990

2.0 Process Description

The Libby Armory operates in one building. The building is approximately 35,000 square feet in area, was estimated to be built in the 1995 with the addition of the maintenance bay in 2003. The building is constructed of concrete masonry units (CMU) with a brick and mortar veneer exterior and some metal siding. The roof is a standard commercial roofing system. The facility consists of a drill floor, kitchen area, multiple administration offices and classrooms, and an indoor firing range (IFR) on the west side of the building. A concrete approach apron is east of the building connecting an asphalt parking area to the street. Parking for the employees is located east of the building with a motor pool to the north. Access to the facility is via Treasure Avenue to the east.

The only unit assigned to the facility is Detachment 1 of the 639th CSSC (UIC: The total number of full time personnel assigned to the facility is two and both are AGR. The work schedule of the facility is Monday through Friday from 0800 - 1700. On drill weekends which is usually one weekend per month, the remaining members of the Detachment consisting of mostly M-day soldiers will attend drill at the facility. The facility is used occasionally for non-National Guard activities or civilian activities in the form of banquets and local dinner gatherings. It was indicated the IFR was only used for a year or so until notice was given to secure it and not enter.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Pege 4 of 23

R & R Environmental. Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1433 of 1990

3.0 METHODS

This section indicates methodologies intended to be used upon initial investigation of the facility. Any deviations from the methodologies indicated in this section are indicated in the corresponding sections of Section 4 of this report.

3.1 Lead Wipe Sampling

Lead residue (dust) wipe samples were collected on horizontal surfaces specifically such as work surfaces and floors throughout the facility to determine housekeeping standards. A total of five lead wipe samples were collected at the facility. Ghost WipeTM brand wipes were used to obtain the samples using a one square foot template. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust. The collected wipe samples were placed in clean and labeled plastic containers. Samples were submitted to ALS Laboratory Group in Salt Lake City, Utah for analysis, using NIOSH Method 7300 modified for Ghost WipesTM. See Appendix I for sample locations and Appendix J for laboratory results. Photographs of the sampling points are located in Appendix C.

The Mather, California office of IHSW has developed a Standard Operating Procedure (SOP) for lead, which is a combination of the Occupational Safety and Health Administration (OSHA), U.S. Department of Housing and Urban Development (HUD), and Army regulations. This SOP sets forth a criterion of 40 micrograms per square foot ($\mu g/ft^2$) for converted indoor firing ranges, break rooms, floor surfaces, or any area that might be used for non-military functions. Additionally, a 200 $\mu g/ft^2$ criterion has been established for tool rooms, maintenance bays, furnace rooms, boiler rooms, storage closets, and other areas where general public access is not expected. Areas of the facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by OSHA 29 CFR 1910.1025 (h)(1).

3.2 Painted Surface Evaluation

The interior of the building was visually inspected by the on-site Industrial Hygienist for peeling paint on the walls, ceilings, and floors. Bulk samples are obtained from paint that is peeling away from the substrate.

Industrial Hygiene Assistance Visit Det. 1, 639⁶ CSSC Armory Libby, Montana Page 5 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1434 of 1990

3.3 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

Microbial growth (e.g., mold or fungus) on building materials may occur when excess moisture is present. Porous building materials such as gypsum board, insulation in walls and ceilings, and carpeting retain moisture and become microbial growth sites if moisture sources are not controlled or mitigated. Potential sources of moisture include rainwater intrusion, groundwater intrusion, condensation on cold surfaces, and water leaks from building systems (e.g., plumbing leaks, HVAC system leaks, overflowing drains, etc.). Inadequate ventilation of clothes dryers and shower stalls may also result in excess moisture conditions. Microbial growth may be clearly visible (e.g., ceramic tile mortar in shower stalls) or may be concealed with no visible evidence of its existence (e.g., inside wall cavities).

During the site reconnaissance a limited visual water intrusion screening survey for readily observable conditions conducive to water intrusion at the property was conducted. The screening consisted of limited interview, document review, and physical observations.

It should be noted that this was a non-intrusive investigation and it is possible that water damaged materials and fungal growth may be present in other areas of the building. This includes, but is not limited to, wallboard, wall cavities, pipe/duct insulation above ceilings and in chases, and wall insulation. In addition, if water damaged building material including sheetrock ceilings and walls are not replaced a favorable environment for microbial growth will be created.

3.4 Asbestos Management

Facility personnel were asked if an asbestos survey and assessment had been conducted and whether there was a written Operations and Maintenance Program for the facility. The Industrial Hygienist also attempted to review any asbestos awareness training records, if they were available.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation and air-conditioning (HVAC) systems that serve the facility was completed. This evaluation consisted of a visual inspection of the system to note any obvious issues and a review of the facility maintenance plan, if one was available.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 6 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1435 of 1990 Carbon dioxide (CO₂), carbon monoxide (CO), temperature, and relative humidity were measured throughout the facility using a TSI VelociCalc Meter Model 9555-P (SN 9555P1013022) connected to a Model 982 Probe (SN P07190021). The unit was calibrated prior to use with certified zero gas and 1,000-ppm CO₂, 35-ppm CO span gas. A copy of the annual calibration certificates for these instruments is located in Appendix H.

CO2 is a normal constituent of exhaled breath and is commonly measured as a screening technique to evaluate whether adequate quantities of fresh outdoor air are being introduced and evenly distributed to interior occupied spaces. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, Ventilation for Acceptable Air Quality, recommend maintaining CO2 below a concentration that is 700 parts per million (ppm) above outdoor levels. If typical CO₂ levels within a building are maintained at or less than 1,000 ppm with appropriate temperature and humidity levels, complaints about indoor air quality should be minimized (American Society for Testing and Materials (ASTM) - International D6245-12, Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality). If a building exceeds this guideline it should not necessarily be interpreted as an unhealthy or hazardous situation. An elevated CO2 level is usually an indication that the amount of outside air being brought into a building may be inadequate or poorly distributed. Outside CO2 concentrations are typically about 350 ppm. Providing sufficient ventilation to maintain steady-state CO2concentrations at this level will assure that a substantial majority of people entering a space will be satisfied with respect to human bioeffluents (body odors). ASHRAE also recommends an outside air supply rate of 20 cubic feet per minute (CFM) per building occupant in office spaces, and, at that ventilation rate, CO2concentrations should not increase over time.

The OSHA PEL for CO is 50 ppm and the ACGIH Threshold Limit Value (TLV) for CO is 25 ppm calculated as an 8-hour TWA. Given these exposure limits, the Department of the Army (DA) Occupational Exposure Limit (OEL) for CO is 25 ppm measured as an 8-hour TWA. ASHRAE recommends temperatures be between 68 and 75 degrees Fahrenheit (°F) also with a relative humidity range of 20 to 60 percent.

In building areas where there are potential sources of CO_2 other than exhaled breath, the guidelines above cannot be used. The OSHA standard for CO_2 should be used in these instances. The OSHA standard is an eight-hour time weighted average (TWA) of 5,000 ppm with a short-term 15-minute average limit of 30,000 ppm.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 7 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1436 of 1990

3.6 Hazard Communication and Hazardous Materials Storage

A review of the facility's chemical inventory and Safety Data Sheet (SDS) file was accomplished, if available. Accessible chemical storage areas such as flammable storage cabinets and containers were also inspected.

3.7 Ventilation Survey

Duct velocity measurements were performed on the facility ventilation devices using a TSI VelociCalc Meter Model 9555-P (SN 9555P1013022) connected to a Model 964 Probe (SN P07180039). A copy of the annual calibration certificates for these instruments is located in Appendix H. For round ducts, 12 velocity measurements are made across the duct opening. Six measurements were made along the diameter at a 90° angle to the first set of measurements. For square or rectangular ducts, 16 velocity measurements are made in a grid pattern. The flow velocities were indicated in lineal feet by the meter and flow rates were calculated by multiplying the average face velocity by the cross-sectional area of the opening. General air flow movement of each building was obtained using a smoke tube. Copies of the general air flow direction can be found in Appendix F.

3.8 Personal Noise Dosimetry and Sound-Level Measurements

3M Edge 5 dosimeters are typically used to collect personal noise exposure levels of facility personnel conducting work that may expose them to greater than the OSHA PEL for noise. If high noise level operations are not occurring during the site visit and noise data is not collected it is noted in Section 4.8 of this report. Dosimeters are calibrated prior to and following each noise measurement using a 3M QC-10 calibrator (SN QIH110257), which was factory calibrated. Each dosimeter is configured with a 3 dBA exchange rate and dose criterion level of 85 dBA in accordance with the Industrial Hygiene Southwest (IHSW) Statement of Work (SOW). The dosimeter and attached microphones are placed at approximately shoulder level of each person being tested and activated to a monitoring status. Once monitoring is completed, the dosimeters are post calibrated using the QC-10 Calibrator and the logged data was recorded on a DD2214 with associated testing data. Calibration certificates can be found in Appendix H.

Industrial Hygiene Assistance Visit Det. 1. 639th CSSC Armory Libby, Montana Page 8 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1437 of 1990 A Casella CEL-254 (SN 2/06426134) dosimeter is typically used to collect noise exposure levels of specific areas and functions occurring at the facility. The dosimeter is calibrated prior to and following each noise measurement using a Casella CEL-110/2 calibrator (SN 074445). Each dosimeter is configured with a 3 dBA exchange rate and dose criterion level of 85 dBA in accordance with the IHSW SOW. The dosimeter and attached microphone is placed at approximately ear level for each activity being tested and then collected at a distance of approximately ten feet from the activity. Once monitoring is completed, the dosimeter is post calibrated using the CEL-110/2 Calibrator, and the logged data was recorded on a DD2214 with associated testing data. Calibration certificates can be found in Appendix H.

The Army DA PAM 40-501, Hearing Conservation requirements noise criterion of 85 dBA with and exchange rate of 3 dBA is used to compare the noise monitoring results. Additionally, the OSHA Permissible Exposure Limit (PEL) of 90 dBA and the OSHA action level of 85 dBA is used to compare the results.

3.9 Illumination Level Monitoring

Illumination measurements are typically obtained in most areas of the facility using a Testo Light Meter, model Testo 540 (SN 39041581/307). Measurements are obtained at typical work locations, such as the tops of desks and near workstations. To provide information on the overall lighting conditions in the remainder of the facility, measurements are obtained from the surfaces of typical work locations and at waist level from selected locations. See the drawing in Appendix E for complete survey information. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.10 Safety Training and Recordkeeping

An inspection of safety training programs and documentation was performed to determine if the facility's site specific training programs and annual documentation were current.

3.11 General Safety Walk-Through

A limited Fire Life Safety walk-through evaluation of the facility was performed to:

· Document the presence of fire alarms,

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 9 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1438 of 1990

- Determine if fire extinguishers are properly mounted and current on their monthly and annual inspections,
- · Determine if eyewash stations are available, and
- · Document fire or safety hazards in the facility

3.12 Equipment Used

The following equipment was available for this survey.

Туре	Model Number	Serial Number	Calibration Date
TSI VelociCalc	9555-P	9555P1013022	9/04/2013
TSI Velocity Probe	964	P07180039	9/04/2013
TSI Air Quality Probe	982	P07190021	9/04/2013
Testo Illumination Meter	Testo 540	39041581/307	3/09/2014
Casella Sound-Level Meter	CEL-254	2/06426134	11/12/2013
Casella Acoustic Calibrator	CEL-110/2	074445	11/12/2013
3M Dosimeter	Edge 5	ESK100116	12/02/2013
3M Dosimeter	Edge 5	ESK100117	12/02/2013
3M Dosimeter	Edge 5	ESK100118	12/02/2013
3M Dosimeter	Edge 5	ESK100119	12/02/2013
3M Dosimeter	Edge 5	ESK080082	9/03/2013
3M dBA Calibrator	QC-10	QIH110257	11/11/2013

Please see Appendix H for a complete inventory of calibration certificates that may have been used during this IHSAV.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana

Page 10 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1439 of 1990

3.13 Quality Assurance

R & R Environmental, Inc. employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 11 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1440 of 1990

4.0 Observations and Recommendations

4.1 Lead Wipe Sampling

Six surface locations were sampled for lead as indicated by the table below. The analytical results for lead wipe sampling indicated four of the samples were greater than the 40 μ g/ft² criterion or the 200 μ g/ft² criterion specified by the IHSW SOP and the ARNG. Since the armory is used occasionally for civilian events, the drill hall floor criterion is 40 μ g/ft². See Appendix I and below for a data table and drawing showing the sample locations and Appendix J for the laboratory reports. Photographs taken of the sampling points are presented in Appendix C. This IFR has not been properly cleaned or converted. The IFR hallway door is kept locked. However, there are not warning signs posted.

Sample Number	Sample Location	Sample Results (µg/ft ²)	ARNG standard (µg/ft ²)		
wı	Drill Hall Floor (Center)	6.6	40		
W2	Drill Hall Floor (Near Armory Entrance)	19	40		
W3	Drill Hall Floor (Near IFR Entrance)	44	40		
W4	Hallway to the IFR	47,000	200		
W5	IFR Firing Line	24,000	40		
W6	IFR Target Area	42,000	40		

 $\mu g/ft^2 = micrograms$ per square foot

<= Less than laboratory detection limit Bold = Greater than ARNG Standard

bold - Greater than AKNO Standard

Recommendation

1. Clean the IFR and floor areas exceeding the IHSW clean-up standard in accordance with the IHSW Armory Clean-up SOP to reduce lead concentrations below the 40 μ g/ft² and the 200 μ g/ft² IHSW SOP criterion level. The Armory cleanup SOP is included in Appendix N.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 12 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1441 of 1990

- Indoor firing ranges shall not be used for any purpose other than firing (i.e., they shall not be used for classrooms, exercise rooms, storage, etc.). Close or convert Indoor Firing Range IAW NGP 420-15.
- Post warning signs on entryway doors for Potential Lead Dust Exposure to pregnant women or those of (child bearing age) and children. Properly close or convert nonactive Indoor Firing Ranges.

4.2 Painted Surface Evaluation

No locations inspected were identified to have peeling paint. Therefore, bulk paint chip samples were not obtained.

For reference, the Housing and Urban Development (HUD) has a Lead-based Paint (LBP) standard of 5,000 mg/kg. HUD is not the governing authority for government maintenance facilities. However, the HUD standard is typically used to determine if lead in paint can be a hazard.

Recommendation

None

4.3 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

No areas of moisture intrusion were noted by the Industrial Hygienist, nor were any moisture intrusion issues reported to exist at the property. It should be noted that water stained areas with no visible mold impact does not mean that mold growth is not present in these areas.

Recommendation

None

4.4 Asbestos Management

An asbestos survey was not located during the site visit. **NON-Responsive** 406-324-5270 indicated the building was constructed in 1995 with an addition in 2003 and did not have an asbestos survey. **Non-Responsive** dicated she believed the building was free of asbestos-containing materials (ACM). Additionally, based on the date of construction ACM is most likely not present for the facility.

Industrial Hygiene Assistance Visit Det. 1. 639th CSSC Armory Libby, Montana Page 13 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1442 of 1990

Recommendation

None

4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

The HVAC system for the facility consists of a ground-mounted compressor unit and forced air heating for the administrative area and additional gas-fired heating units in the maintenance bay area. The system is serviced by a non-DOD maintenance contract.

The average outdoor CO_2 concentration at the time of the survey from the exterior of the building was 440 ppm. The highest CO_2 concentration measured in the facility was 530 ppm. This level of CO_2 should not result in indoor air quality complaints.

The highest CO concentration measured in the building during the IHSAV was 1.1 ppm which indicates the CO levels are well below the DA OEL of 25 ppm as an 8-hour TWA.

Building air temperatures ranged from 67°F to 74°F and the relative humidity ranged from 38.5% to 46.9% during the testing period. Air temperatures were generally in the recommended comfort range of 68°F to 75°F. The relative humidity was in the recommended ASHRAE comfort range of 30% and 60%. Humidity levels above 60% can result in proliferation of bacteria and fungi, while levels below 30% can cause dry eyes, skin, and mucous membranes. However, weather reports for the area during the time of the survey were consistent with what was found in the buildings and the buildings was operating in a closed door configuration.

Recommendation

None

4.6 Hazard Communication and Hazardous Material Storage

A Hazard Communication (HazCom) Plan was kept on file in the Readiness NCO's office. Initial HazCom training was listed for both employees. The last listed HazCom refresher training was dated September 2013 which is current. An additional course identified in the HazCom Plan was the OSHA for First Line Supervisors Course.

Chemicals for equipment maintenance and janitorial uses are maintained at the facility in minimal quantities. A master chemical inventory listing for the facility is maintained in the readiness NCO's office. A copy of this list can be found in Appendix D. The SDS file is

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 14 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1443 of 1990 still listed as MSDS since the Globally Harmonized System (GHS) Classification of Labeling Chemicals has just taken effect and the documents are still MSDS documents. An SDS binder is located in the shop area. The master list matched the individual SDS binder and the SDS binder was representative of what was located in each of the individual cabinets. Approximately 10% of the chemicals stored were verified against the SDS binder.

A POL flammable storage room was located in the northeast corner of the building. There is a fire extinguisher located in the POL room.

Recommendation

Update all MSDS for the facility with the new SDS format.

4.7 Ventilation Survey

The facility provides level 10 maintenance for a small number of vehicles. The maintenance bay is equipped with two vehicle exhaust drops with a flexible hose that can be extended to reach the vehicle exhaust outlet. The flow rate for each of the exhaust drops is listed in Appendix F. The flow rates were 284 cubic feet per minute (cfm) from the vent drop on the north side of the maintenance bay and 511 CFM from the vent drop on the south side of the maintenance bay. The north exhaust drop was torn.

The connections at the end of the hoses are circular metal of 10 inches in diameter. These connections do not fit many exhaust configurations. ACGIH recommends a local vehicle exhaust system that exhausts 400-1,200 cfm for diesel-powered trucks and 1,400-2,200 cfm for turbocharged vehicles. The exhaust flow rate range is dependent on the engine rpm where the lower range is for and idling engine. The U.S. Army Corps of Engineers (USACE) recommends a minimum flow rate of 400 cfm for a 300 HP engine, 600 cfm for a 500 HP engine, 1,000 cfm for a 700 HP engine, and 1,400 cfm for a turbocharged diesel engine up to 500 HP.

The US Army Corps of Engineers' specifications for minimum exhaust rates by engine horsepower are as follows:

Diesel Engines Up To:	Required cfm				
200 Hp	300				
300 Hp	400				
500 Hp	600				

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 15 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1444 of 1990

BEST AVAILABLE COPY

700 Hp	1,000
500 Hp (Turbo-charged)	1,400

The ARNG-CSG-P Memorandum for Record, ARNG Maintenance Shop Local Exhaust Ventilation Measurements indicates an acceptable level of 850 CFM for vehicles and allows for future size increases in vehicles and system deterioration over time.

Both of the exhaust ventilation drop flow rates measured in the maintenance bay did not meet the ARNG minimum recommended requirements for a 500 HP idling engine. A list of vehicles serviced in this facility is listed in Appendix Q in addition to the facility information.

The other vent mechanism identified was the kitchen ventilation hood. The vent either did not operate when the switch was thrown or some other action needed to be taken. Therefore, ventilation measurements were not obtained from the kitchen hood.

Since the buildings were in the closed door configuration, air flow generally followed a stagnant pattern.

Recommendation

- Upgrade the exhaust ventilation in the maintenance bays to meet the ARNG minimum requirements for the type of engines serviced in the bays per the ARNG Memorandum for Record and repair the north exhaust drop tear.
- Either repair the kitchen ventilation hood or post operating instructions indicating how to initiate the ventilation hood.

4.8 Personal Noise Dosimetry and Sound-Level Measurements

None of the full time personnel conducted operations that required hearing protection according to Non-Responsive phone 406-324-5270. Therefore, no sound level testing or noise dosimetry was performed.

Recommendation

None

Industrial Hygiene Assistance Visit Det. 1, 639^a CSSC Armory Libby, Montana Page 16 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1445 of 1990

4.9 Illumination Level Monitoring

Illumination levels measured throughout the facility can be found in Appendix E. The numbers represent the measured illumination levels in foot-candles (ftc). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or a bench were taken at waist level. Supplemental lighting is used for specific work in darker areas, such as under the hoods of vehicles.

The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 ftc is the minimum lighting requirement for the performance of tasks where reading is required, 30 ftc is required for work areas where reading is not required, 10 ftc is required for non-work areas, such as aisles and corridors, and 5 ftc is required for walking surfaces such as mechanical spaces.

Based on the above criteria the general lighting in all areas measured is adequate for the tasks performed.

Recommendation

None

4.10 Safety Training and Documentation

The following safety policies, procedures and training were identified at the facility:

- The Army Safety Program, AR 385-10
- System Safety Management Guide, DA Pam 385-16
- Small Unit Safety Officer/NCO Guide, DA Pam 385-1
- Emergency Evacuation Plan
- Initial HazCom Training
- HazCom Refresher Training
- Army National Guard Safety Program, NGR 385-10

Recommendation

None

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana

Page 17 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1446 of 1990

4.11 General Safety Walk-Through

1. Housekeeping throughout the facility was good.

2. There were fire alarms present in this facility.

3. Fire extinguishers are strategically located throughout the facility. The monthly inspections were current for each fire extinguisher identified and fire extinguisher arrows were also present. The annual inspections were current.

Fire evacuations routes were posted in the rooms of the facility.

5. An eyewash/deluge shower stations is located in the maintenance bay. The annual and weekly inspections were current for the station. The eyewash station/deluge shower was not equipped with an alarm system.

6. Electrical panels are closed and labeled and observed junction boxes were sealed.

7. Electrical outlets were labeled with voltage limits.

8. Emergency lighting is installed in the facility. Each emergency lighting unit was functional and an inspection checklist was posted.

Recommendation

Install an alarm system on the eyewash stations/deluge showers in the shop area and lube bay.

4.12 Battery Storage and Charging

Battery storage and charging does not occur at the facility according to phone 406-324-5270.

Recommendation

None

4.13 Brake Relining/Changing Operations

Brake relining/changing operations do not occur at the facility according to hone 406-324-5270.

Industrial Hygiene Assistance Visit Det. 1, 639[#] CSSC Armory Libby, Montana Page 18 of 23

R & R Environmental. Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1447 of 1990

Recommendation

None

4.14 Flammable Storage Cabinets

There are two flammable storage cabinets located at the facility in the northeast corner of the building. These lockers were inspected and no storage incompatibilities or leaking materials were identified. The lockers were in good condition and all doors were noted to close properly. Each locker was labeled with the appropriate NFPA label, flammable sign, and a no smoking signs.

Recommendation

None

4.15 Petroleum, Oil, Lubrication Area

The petroleum, oil, and lubrication (POL) area is located in the northeast corner of the building. The POL is very minimal. The POL room is properly labeled with the NFPA label and a no smoking sign. The POL storage room is very neat and well kept. Approximately 10% of the storage buildings contents were verified against the MSDS folder kept in the maintenance shop and each of the materials verified had corresponding sheets in the binder.

Recommendation

None

4.16 Hazardous Waste Accumulation

Hazardous waste accumulation does not occur at the facility since only 10 level maintenance occurs at the facility according to Non-Responsive phone 406-324-5270.

Recommendation

None

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 19 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1448 of 1990

4.17 Oily Rags

Oily rags are collected in a metal container in the shop area. When the satellite area container becomes full, the materials/wastes are transferred to the FMS or CSMS in the container for disposal.

Recommendation

None

4.18 Personal Breathing Zone Air Sampling

No maintenance activities were performed involving chemicals that warranted personal air sampling.

Recommendation

None

4.19 Small Arms Cleaning

No small arms cleaning are performed at this facility as indicated by Non-Responsive

Recommendation

None

4.20 Fuel Storage and Refueling

Fuel storage and refueling does not occur at this facility and are performed on the economy

as indicated by Non-Responsive

Recommendation

None

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby. Montana

Page 20 of 23

R & R Environmental. Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1449 of 1990

5.0 Recurring Observations

- 1. The analytical results for lead wipe sampling indicated four samples were greater than the 40 μ g/ft² criterion or the 200 μ g/ft² criterion specified by the IHSW SOP and the ARNG.
- 2. The IFR has not been properly cleaned or converted.
- 3. The IFR hallway door is kept locked. However, there are not warning signs posted.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 21 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1450 of 1990

6.0 Project Limitations

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, R&R Environmental's professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. R&R Environmental, Inc. assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of R&R Environmental, Inc., or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since R&R Environmental, Inc. is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 22 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1451 of 1990 BEST AVAILABLE COPY

7.0 Project Approval

This IHSAV was reviewed and approved by:

Non-Responsive CSP R & R Environmental, Inc. Vice President

Date: June 17, 2014

Technical Assistance: For technical assistance regarding information found in this report or the performed survey; please contact R&R Environmental, Inc. at 801-352-2380 or **Von Response** of the Southwest Regional Industrial Hygiene Office, 916-854-1491. Contact the State Safety and Occupational Health Office, the State Industrial Hygiene Technician, and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

Industrial Hygiene Assistance Visit Det. 1, 639th CSSC Armory Libby, Montana Page 23 of 23

R & R Environmental, Inc. R & R Job Number: RR-140432-1

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1452 of 1990

Appendix A

References

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process
- AR 385-10, The Army Safety Program
- Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

- TB MED 503, The Army Industrial Hygiene Program
- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

Appendix B

Assessment Criteria

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information. The rates were also compared to the ARNG-CSG-P Memorandum, dated November 2013 (ARNG Maintenance Shop Local Exhaust Ventilation Measurements)

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Occupational Exposure Limit

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).



Photo 1: Libby, Montana Armory.

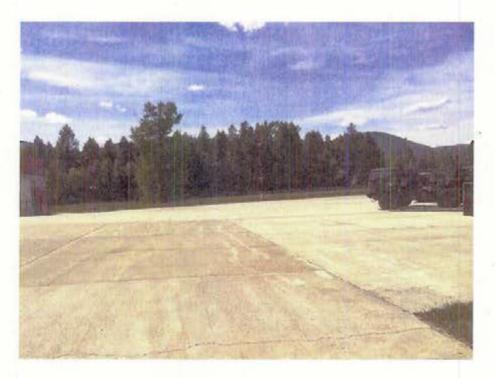


Photo 2: Armory Motor Pool.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1456 of 1990



Photo 3: Armory Flammable Materials Storage.

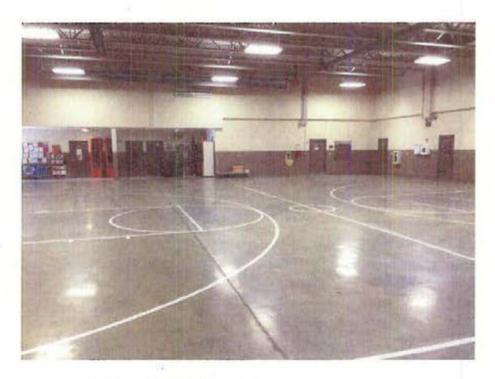


Photo 4: Drill Floor (Gym) Area.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1457 of 1990



Photo 5: Maintenance Bay.



Photo 6: Eyewash/Deluge Shower with no Alarm.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1458 of 1990



Photo 7: Tear in North Exhaust Vent.



Photo 8: IFR Entrance Door.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1459 of 1990

02

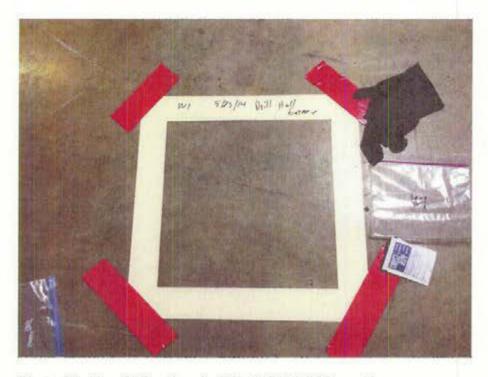


Photo 11: Lead Wipe Sample W1; Drill Hall Floor - Entrance.



Photo 12: Lead Wipe Sample W2; Drill Hall Floor - Center.



Photo 13: Lead Wipe Sample W3; Drill Hall Near IFR Exit Door.

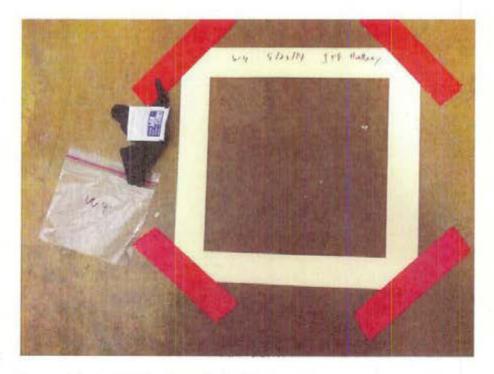


Photo 14: Lead Wipe Sample W4; IFR Hallway.

Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1461 of 1990 8



Photo 15: Lead Wipe Sample W5; IFR Firing Line.



Photo 16: Lead Wipe Sample W6; IFR Target End.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1462 of 1990

Hazardous Materials Center

Item Search

Print Inventory Cancel

Libby Readiness Center / DET 1 639th Quartermasters

Download to Excel

Cleaning Closet - Floor - 1/2014

SLN	Product Name	NSN	Manufacturer	Description	MSDSID	Quantity	Unit of Issue	Shelf Life	HCC	Excess	
	Concrete Sealer	0	Tough guy			2	5 Gal box				
	Floor Stripper	0	Hillyard Industries	0		1	5 gal				
	Ice Melter	0	Premiere Pro			1	50lb box	£			
	Ice Melter	0	Scotwood IND			2	50lb bucket			8	

Cleaning Closet - Shelf 1 - 1/2014

SLN	Product Name	NSN	Manufacturer	Description	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс	Excess
	Air Freshener	0	Spray Pak			З	15oz cans			
	Floor Sealer	0	Betco		607	2	Gal			
	Floor Wax	0	Betco		610	2	Gal			
	Pine-Sol	0	Clorox			1	Gal			
	Powe Time Clingling Foam Cleaner	0	RMC			1	Gal			
	Shower Cleaner	0	Co-Star			1	1 Gal.			9
	Urinal Block w/screen	0	RMC			4	4 oz blocks			
	Urinal Blocks	0	Krystal			4	4 oz blocks			
B02	Scouring Powder	7930-00-721-8592	Fitzpatrick Brothers		BFMGK	28	21 óz can	24	N1	
C01	Soap Toilet	8520-00-634-0335	unknown			11	bars '			
D01	Tollet Cleaner, Pull	0	Betco Co.			12	1 qt bottles			
E01	Ajax Quik Solv	0	Colgate Palmolive			1	1 qt bottle			
E02	Glass Cleaner	0	AmSan			2	Gal			

Cleaning Closet - Shelf 2 - 1/2014

SLN	Product Name		NSN	Manufacturer	Description	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс	Excess	
	C. ibernet Lemma							18				26
B02	Sunbonnet Lemon Wax	0		The Butcher Co.			2	can				

Posted to NGB FOIA Reading Room May, 2018

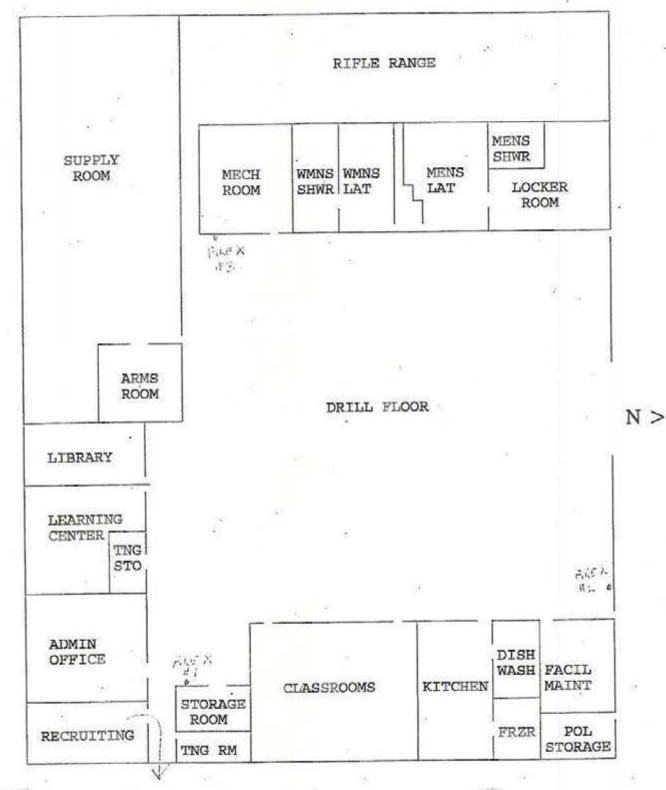
Flammable Cabinet 01 - 1/2014

SLN	Product Name	NSN	Manufacturer	Description	MSDSID	Quantity	Unit of Issue	Shelf Life	HCC	Excess
	WD40	0	WD40	10		1	11 oz can			
3	SPRAY PAINT BLACK		BALL			7	10 oz can			
	Graffitti and Spray Paint Remover	0	Tough Guy			2	10oz. Can			- 8
	Grease In A Can	0	Ball			1	14oz. Can	83 83		
	Spray Paint Fluorescent Yellow	0	ACE			2	12oz. Can			
	Spray Paint Pumpkin Orange	0	Krylon	89		2	12oz. Can			
	Spray Paint Yellow Enamel	0	ACE			2	12oz. Can			
	Wasp & Hornet Killer	0	Ace			O,	14oz can			5)
A01	3M Super Trim Adhesvie	8040-00-F01-9788	3M Trade Division		BNJCL	1	18 oz can			
A02	Tape Primer	8040-00-N00-0142	3M Trade Division		BCDTR	3	15 oz can			
B03	Ace Paint Striper	8010-00-N05-6585	Ace Speciality Division			1	12 oz can			

Flammable Cabinet 02 - 1/2014

SLN	Product Name	NSN	Manufacturer	Description		Quantity	Unit of Issue	Shelf Life	нсс	Excess	
	ATF	0	Dextron VI		×	2	1 qt bottle	2			
	Cleaning Compound Windshield	6850-00-926-2275	Rite-Kern Inc		*	4	16oz bottles				
	Coolant/Antifreeze	6850-01-464-9125	Fleetcharge			1	Gallon				
	Grease/Auto Artillery	9150-00-190-0907	Sowes Co			1	5Gal. Bucket			2	
	Grease/Auto Artillery	9150-00-197-7692	Sowes Co.	8		1	5Gal. Bucket				
	Hydralic Fluid	0	NA	8	5	3	Gal				
	Power Steering Fluid	0	Pyroll			2	12fl oz cans				
A04	Engine Starting Fluid	2910-01-128-9537	Kold-Ban International LTD			4	can				2
A05	Grease/Auto Artillery	9150-01-197-7693	Southwest Petro Chem Div			16	14oz. Tubes				

BEST AVAILABLE COPY Det 1 HHC 2-163d Cavalry Battalion Montana Army National Guard 1004 Treasure Ave Libby, MT 59923

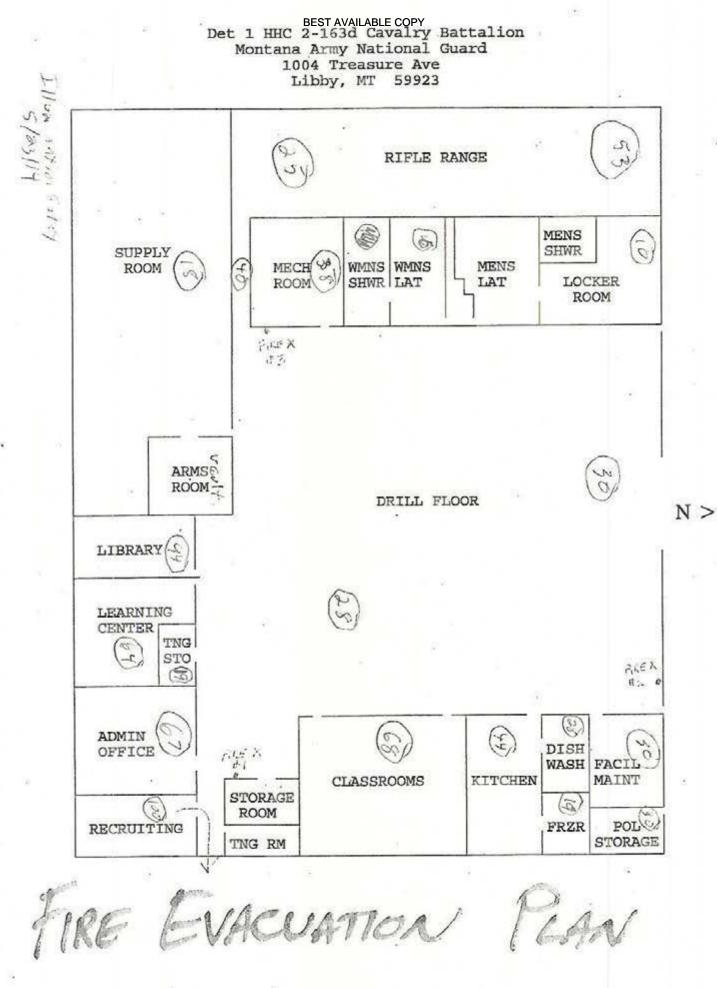


FIRE

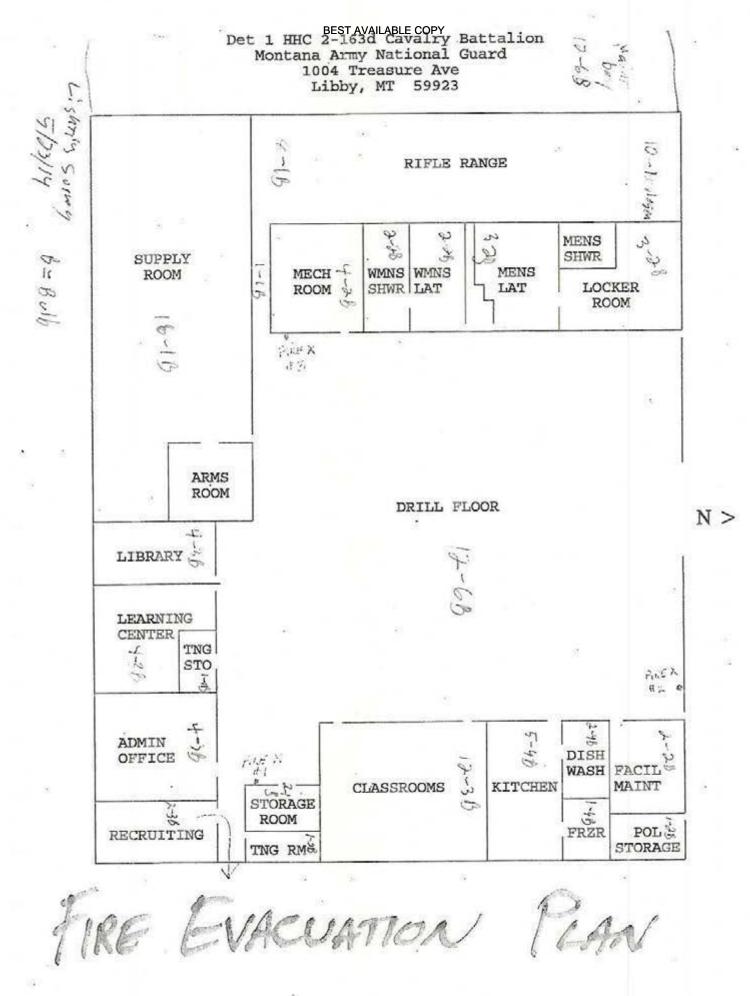
EVACUATION

Posted to NGB FOIA Reading Room May, 2018

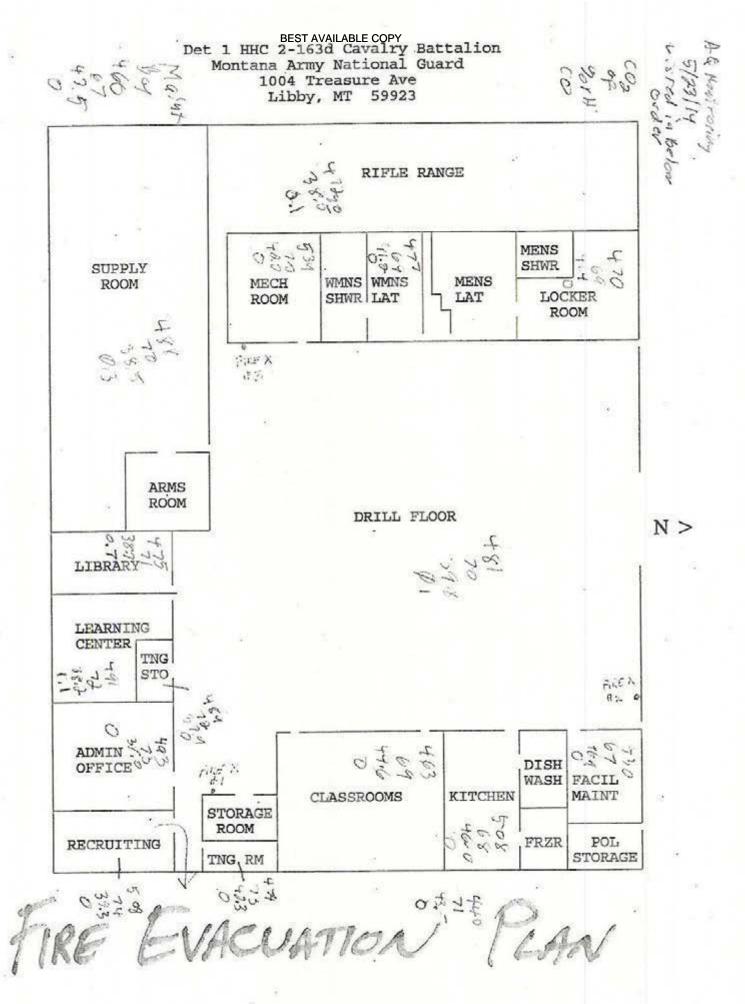
FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1468 of 1990



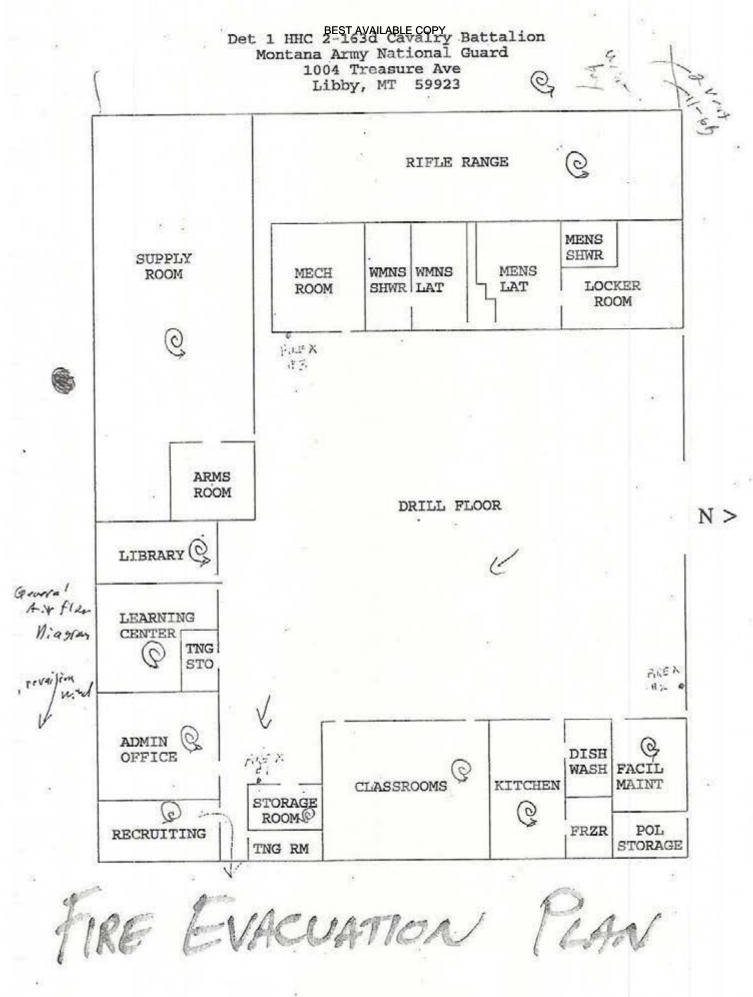
FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1469 of 1990



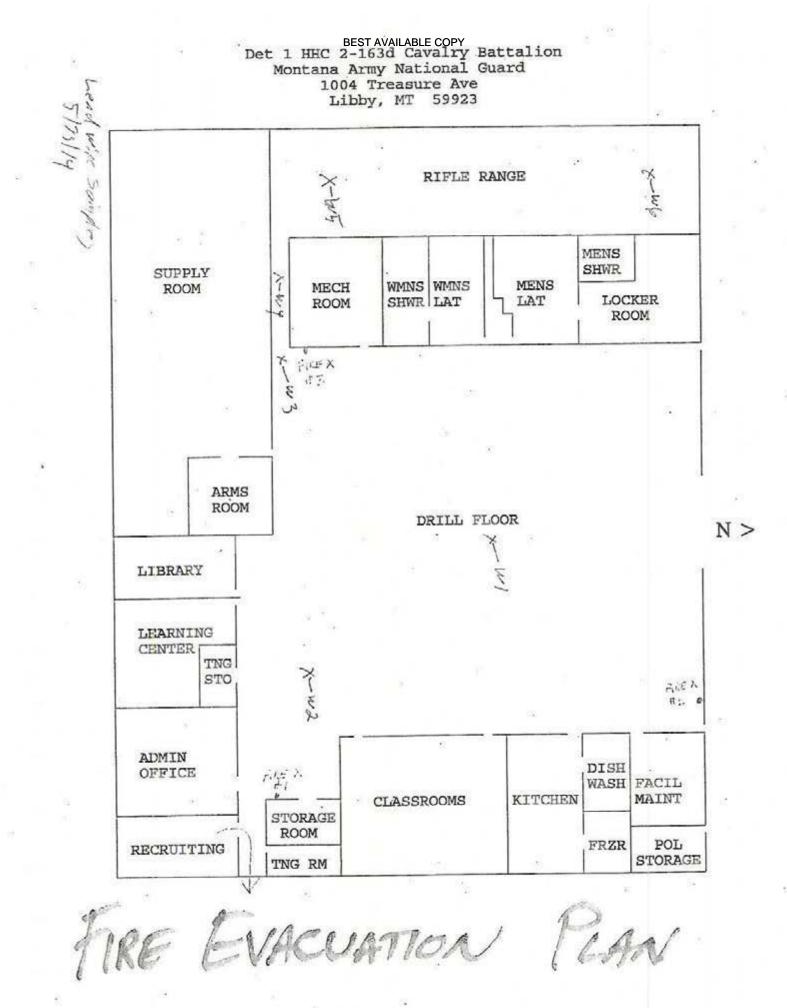
FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1470 of 1990



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1471 of 1990



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1472 of 1990

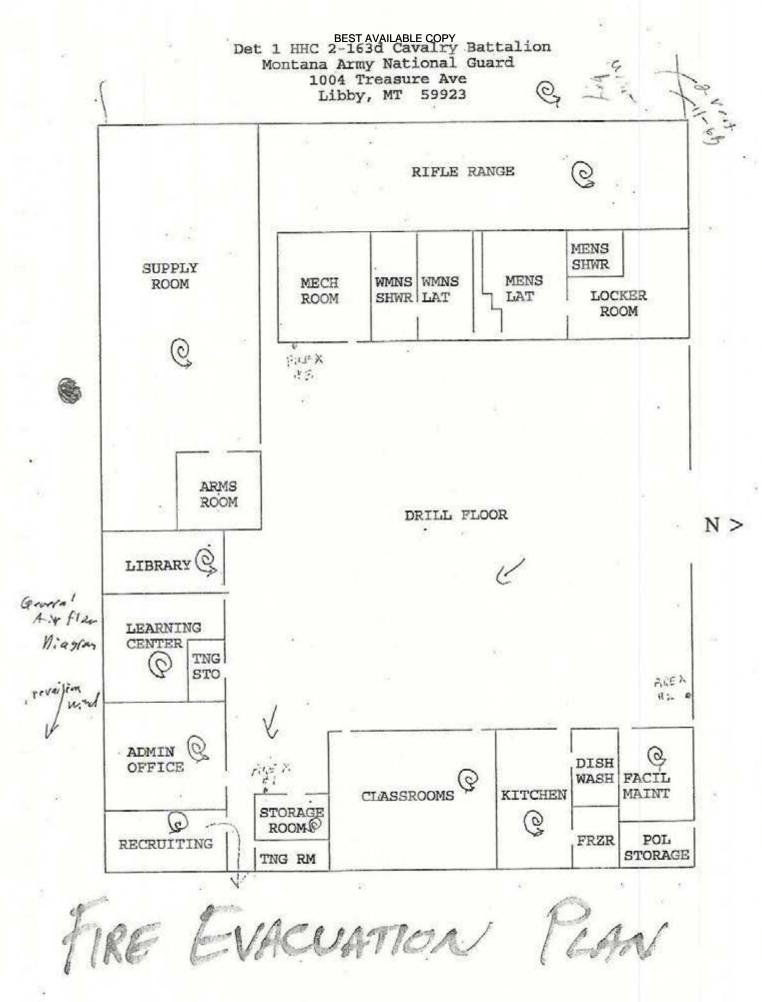


FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1473 of 1990

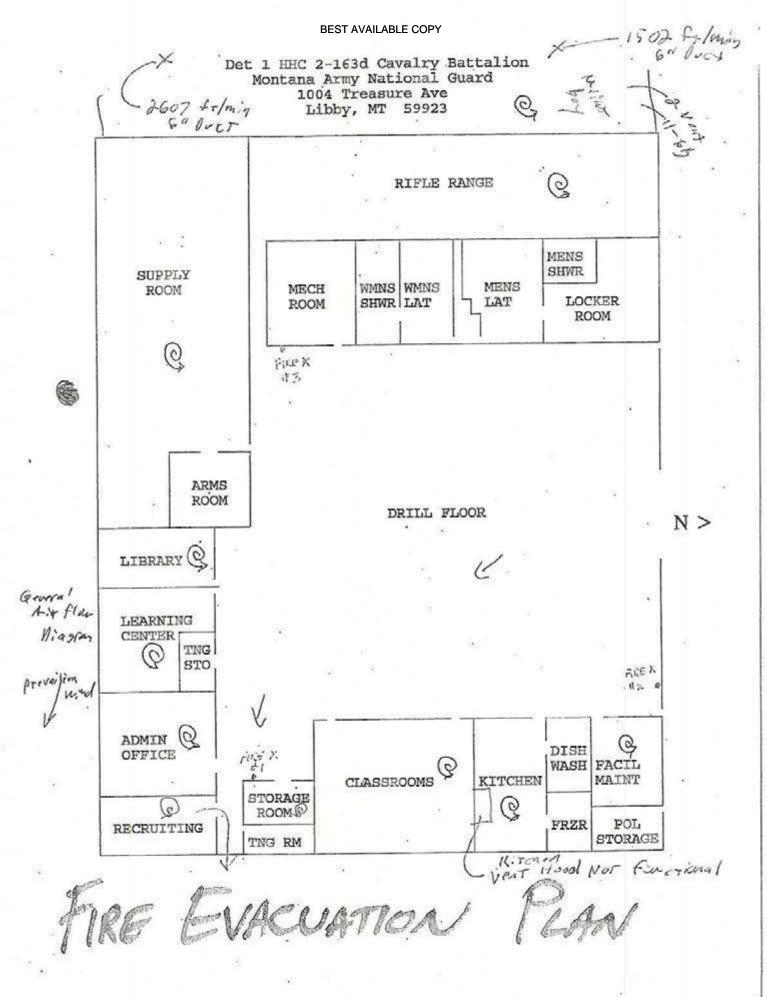
BEST AVAILABLE COPY LOCAL EXHAUST VENTILATION SYSTEM MEASUREMENTS ARMORY - LIBBY, MONTANA 23 MAY 2014

Monitoring Location	Area of Flow ft ²	Velocity In ft/min	Flow Rate ft ³ /min
Vehicle Exhaust Vent - North - 6" dia	0.196	1,502	294
Vehicle Exhaust Vent - South - 6" dia	0.196	2,607	511
Kitchen Vent Hood 3'x 6'	Not Measured	N/A	N/A

* $Q = A \times V$ Where $A = Area in ft^2$, $V = Velocity in ln ft/min, Q = Flow Rate in ft^3/min$



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1475 of 1990



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1476 of 1990

SSG Amy Good Amy. L. Good S.mile 406-324-5270 Readings NCO + Hilding Mgr. Derl 639 TO CSSC UEC: WPRHAI 7 Yearly Civillams Functions >10-14. Main on size Mains Bay in 2003 >35 Kf. 2 Main Hlds in 95 - Amy Good - 9045 Steve Heary - Supply 1905 No ACM Head on dare of constraining LMTV LHS 101 FMTV IT M MUC FORKISFAS -No Druh Jobs - No brack haven - IPR Not used A-MSDS X-S NO SPS - propane Heart off sire - HVAC = off Six contracted Root Manta _ pur

INVIRONMENT CONDITION			MODEL		955	5.P
EMPERATURE	67.3 (19.6)	*F (*C)	MODEL		000	5-1
RELATIVE HUMIDITY	40	%RH	SERIAL NUM	REP	9555P1	013022
AROMETRIC PRESSURE	28.77 (974.3)	inHg (hPa)				
🖾 AS LEFT		174 K. 1967	N TOLERANCE			
AS FOUND			NUT OF TOLERANCE			
- C A	LIBRAT	ION VER	IFICATIO	N RESU	LTS-	
THERMO COUPLE		Contraction of the local division of the loc	EM PRESSURE	the state of the s		Unit: °F (°C)
STANDARD MEASURED	the second state of the se	ABLE RANGE	HI STANDAR	And in case of the local division in which the local division in t	The second	ABLE RANGE
and the second sec	1		EM PRESSURE	1_02	In	It: InH,O (Pa)
STANDARD MEASURE	T ALLOW	AILE RANGE	# STANDARD	and the second se		BLE RANGE
-3.670 (-913.8) -3.688 (-918.3		29 (-924.0-903.	6) 3 7.979 (1986.)	3) 7.980 (1987.	0) 7.895-8.063	(1965.9-2007.7)
1.864 (464.1) 1.861 (463.4)	1.841~1.88	37 (458.4~469.9)	4 13.783 (3432	0) 13.793 (3434	.5) 13.641~13.925	5 (3396.6-3467.3)
BAROMETRIC PRESSURE		Syst	EM PRESSURE)1-02	Un	lt: InHg (hPa)
BAROMETRIC PRESSURE	ALLOWAT	SYST ILE RANGE	EM PRESSURE	1-02 MEASURED	Un	it: InHg (hPa) BLE RANGE
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7)	ALLOWAT 19.55-20.35 28.29-29.45	Syst LE RANGE (662.0-689.1) (958.0-997.3)	TEM PRESSURE(# STANDARD 3 35.57 (1204.5) to the original many raceable to the Unite n whose occurrecy is DI;2008 and meets th	01-02 MEASURED 35.56 (1204.2) Acchurer's specific d States Nationa tracoable to NIS be requirements of	Un ALLOWAI 34.86-36.28 (34.86-36.28 (34.86-36.28 (1 Institute of Stando T, or is derived from 1 Institute of Stando T, or is derived from 1 ISO 10012:2003.	II: InHg (hPa) BLE RANGE 1180.5~1228.6) ble to As Found ards and m accepted values
BAROMETRIC PRESSURE STANDARD MEASURED 1 9.95 (675.6) 19.95 (675.6) 2 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5) that the abor- tat) and has been calibrated using behavlegy (NIST) or has been very f phrateal constants. TSI's calibrat Measurement Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) cocuracies are in to institumentation isiered to ISO-900 al. Cal. Due 13 02-96-14 13 09-21-13	EM PRESSURE(# STANDARD 3 35.57 (1204.5)	01-02 MEASURED 35.56 (1204.2) Conturer's specific d States National traceable to NIS be requirements of reriable System E0036 E0034	Un ALLOWAI) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003. 1 Institute of Standor 7, or is derived from 150 1001 2:2003. n ID - Last Cal. 184 10-03-12 193 03-14-13	lt: InHg (hPa) BLE RANGE 1180.5~1228.6)
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cartify that the abon tal and has been calibrated using tal molegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) cocuracies are in to institumentation isiered to ISO-900 al. Cal. Due 13 02-96-14 13 09-21-13	TEM PRESSURE(B STANDARD 3 35.57 (1204.5) to the original manup receable to the Unite number occuracy is 64:2008 and meets th Messurement V Pressure	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAI) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003. 1 Institute of Stando 7, or is derived from 150 1001 2:2003. n ID · Last Cal. 184 10-03-12 193 03-14-13	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cartify that the abor- tati and has been calibrated using echnology (NIST) or has been very fphnatcal constants. TSI's calibrat Measurement Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	TEM PRESSURE(B STANDARD 3 35.57 (1204.5) to the original manup receable to the Unite number occuracy is 64:2008 and meets th Messurement V Pressure	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(5 that the abor- tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13
BAROMETRIC PRESSURE STANDARD MEASURED 19.95 (675.6) 19.95 (675.6) 28.87 (977.7) 28.87 (977.7) SI does hereby cart(f) that the abor tal and has been calibrated using relawlegy (NIST) or has been very physical constants. TSI's calibrat Measurgment Variable Syste Temperature E002 Pressure E003	ALLOWAI 19.55-20.35 28.29-29.45 28.29-29.45 te described Insu standards whose fied with respect lon swatem is reg m ID Last C 827 02-96- 982 03-21-	Syst nLE RANGE (662.0-689.1) (958.0-997.3) mmeet conforms (eccuracits and In to instrumentation istered to ISO-904 al. Cal. Due 13 02-96-14 13 09-21-13	to the original manup recedie to the Unite pathogeneous of the original manup recedie to the Unite pathogeneous of the Uni	Arriable System Septemb	Un ALLOWAT) 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 34.86-36.28 () 1001 2:2003 () 150 1001 2:200	ht: InHg (hPa) BLE RANGE (1180.5~1228.6) ble to As Found ands and in accepted values Cal, Due 10-03-13

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1478 of 1990

ĽE

RN ORIGINAL

TBI FIN 2300157

CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Faz: 1-651-490-3824 http://www.tsi.com

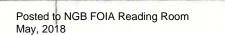
Εķ	IVIRONMENT C	ONDITION	1453 M - Common			TODEL.		982	
Te	MPERATURE		74.1 (23.4)	°F (°C)	"	TODEL,	-	302	
RE	LATIVE HUMIDIT	TY.	53	%RH				DATIONAL	
BĄ	ROMETRIC PRES	SUKE	29.09 (985.1)	inHg (hPa)		ERIAL NUME	JER	P07190021	
	AS LEFT			A655		erance Tolerance	I		
		- C A L	IBRATI	ON VE	1000		N RESULT		
T	MPERATURE	VERIFICATION			SYS	TEM T-101	- 194	Unit: °F (°C)	
#	STANDARD	MEASURED	ALLOWAR	LE RANGE	#	STANDARD	MEASURED	ALLOWABLE RANGE	
1	32.0 (0.0)	32.6 (0.3)	31.033,0	(0.6-0.6)	2	140.0 (60.0)	140.7 (60.4)	139.0-141.0 (59.4-60.6)	
H	UMIDITY VERI	FICATION			SYS	гем H-102		Unit: %Rh	
#	STANDARD	MEASURED	ALLOW	ABLE RANGE	#	STANDARD	MEASURED	ALLOWABLE RANGE	
1	10.0	9.5	7.	0~13.0	4	70.0	69.3	67.0-73.0	
2	30.0	29.8	27	.0~33.0	5	90.0	85.4	87.0-93.0	
3	49.9	49.7	46	.9-52.9					
CC	2 GAS VERIF	ICATION		ALCONTRACT.	SYS	TEM G-101		Unit: ppn	
#	STANDARD	MEASURED	ALLOW	ABLE RANGE	#	STANDARD	MEASURED	ALLOWABLE RANGE	
1	0	0		0-50	4	3000	3021	2910~3090	
2	506	497	4	56~556	5	4980	5011	4831~5129	
3	1003	1012	95	3~1053					
CC	GAS VERIFI	CATION			Sys	гем G-101		Unit: ppm	
#	STANDARD	MEASURED	ALLOW	ABLE RANGE	11	STANDARD	MEASURED	ALLOWABLE RANGE	
	Construction of the second second second	36	And a subscription of the second seco	12~38	2	100	100	97~103	

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable to NIST, or is derived from accepted values of physical constants, TSI's calibration system is registered to ISO-9001:2008 and meets the requirements of ISO 10012:2003.

Measurement Variable Temperature	System ID E003986	Last Cal. 04-12-13	Cal. Due 10-12-13	Measurement Variable Temperature	System ID E003987	Last Cal. 04-12-13	Cal. Due 10-12-13
Humidity	E003539	08-21-13	08-21-14	5000 CO2	k100246125	07-22-13	07-02-16
200 CO	EB0014717	07-08-13	06-03-21	N2	28210	08-20-13	08-08-18
Air	T-0158	08-15-13	06-20-16	Flow	E004631	07-08-13	07-08-14
Flow	E003298	07-08-13	07-08-14	Flow	E003981	11-14-12	11-14-13
Flow	E003525	03-12-13	03-12-14	2000 C4H8	EB0028230	05-25-12	05-18-15
100 C4H8	EB0004721	08-23-12	08-22-15		Contraction and Contraction		

pon

DOG. ID: GERT_GEN_WCG



BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1479 of 1990

CERTIFICATE MAY BE COPIED

September 4, 2013 DATE

CERTIFICATE OF CALIBRATION AND TESTING

TSI Incorporated, 500 Cardigan Road, Shorevlew, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

EN	NVIRONMENT CONDITION					MODEL			964	
TEN	PERATURE		74.1 (23.4)	*F (*C)						
REL	ATIVE HUMIDIT	TY	52	%RH		e	RIAL NUM			P07180039
BAR	OMETRIC PRES	SURE	29.08 (984.8)	inHg (hPa)		36	RIAL INDOI	BER		101100000
	As LEFT				T NI	200	OLERANCE			
		- C A 1	IBRAT	ION V	ERI	FI	CATIO	NRE	SULI	r s
TE	MPERATURE	VERIFICATION	1		S	VST	EM T-101	N. 5		Unit: °F (°C
#	STANDARD	MEASURED		ALLOWABLE RANGE		S	TANDARD	MEASURED		ALLOWABLE RANGE
1	32.0 (0.0)	32.2 (0.1)	the second se	31.5-32.5 (-0.3-0.3)		14	0.0 (60.0)	139.8 (59.9)	139.5~140.5 (59.7~60.3)
Un	MIDITY VER	RICATION			S	VST	EM H-102	1		Unit: %R)
4	STANDARD	MEASURED	ALLOW	ABLE RANG		#	STANDARD	MEA	SURED	ALLOWABLE RANGE
1	10.0	10.2		.0-13.0		4	70.0	1.1	70.2	67.0~73.0
2	30.0	30.1		7.0~33.0	-	5	90.0	1	39.4	87.093.0
3	49.9	50.3		5,952,9						
VE	LOCITY VER	UFICATION			S	VST	EM V-107	1		Unit: ft/min (m/s
-	STANDARD	MEASURED	ALLOWABI	E RANGE	#	S	TANDARD	MEASU	RED	ALLOWABLE RANGE
1	0 (0.00)	0 (0.00)	-3-3 (-0.	02~0.02)	7	6	51 (3.30)	648 (3	29)	631~670 (3.21~3.40)
2	35 (0.18)	36(0.18)	3238 (0.		8	10	02 (5.09)	1003 \$3	(90)	972-1032 (4.94-5.24)
3	66 (0.33)	65 (0.33)	63-69 (0.		9	14	71 (7.47)	1478 (7	(.51)	1427~1515 (7.25~7.70)
4	101 (0.51)	99 (0.50)	97-104 (0	COLUMN TO A COLUMN TO A COLUMN	10	25	01 (12.71)	2485 (1	and the second se	2426~2576 (12.33~13.09)
3	161 (0.82)	161 (0.82)	156-166 (0	.79~0.84)	11	45	02 (22.87)	4484 (2		4367-4637 (22.18-23.55)
6	331(1.68)	330 (1.68)	321-341 (1	.63~1.73)	12	80	13 (40.71)	7991 (4	0.59)	7773~8254 (39.49-41.93)

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable to NIST, or is derived from accepted values of physical constants. TSI's calibration system is registered to ISO-9001:2008 and meets the requirements of ISO-10012:2003.

Measurement Variable l'emperatura Humidity Barometric Pressure Pressure Velocity	System ID E003986 E003539 E001992 E001718 E004603	Last Cal. 04-12-13 08-21-13 04-04-13 05-23-13 09-19-12	Cal. Dec 10-12-13 08-21-14 04-04-14 11-23-13 09-19-17		Measurement Variable Temperature DC Voltags Temperature Pressure	System,ID E003987 E001653 E001643 E002389	Last Cal. 04-12-13 07-12-12 05-23-13 08-27-13	Cal. Due 10-12-13 01-12-14 11-23-13 02-27-14	
---	--	---	--	--	--	---	---	--	--

espons September 4, 2013 DATE DOC. D: CERT_GEN_WOG CERTIFICATE MAY BE COPIED RETURN ORIGINAL

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1480 of 1990



GASCO AFFILIATES, LLC.

320 Scarlet Blvd. Oldsmar, FL 34677 (800) 910-0051 Fax: (866) 755-8920 www.gascogas.com

CERTIFICATE OF ANALYSIS

Date: January 2, 2014 Order Number: 729-1 Lot Number: MAN-1-10 Customer: RAECO Rents, LLC

Use Before: 01/02/2018

Component

20.9% vol.

Analytical Result (+/- 2%)

Oxygen Nitrogen Balance

Specification

20.9% vol. THC <0.1 PPM Balance

Cylinder Size: 3.6 Cu. Ft. Contents: 103 Liter

Valve: 5/8" -18UNF Pressure: 1000 psig

The calibration gas prepared by Gasco is considered a certified standard. It is prepared by gravimetric, or partial pressure techniques. The calibration standard provided is certified against Gasco's G.M.I.S. (Gas Manufacturer's Intermediate Standard) which is either prepared by weights traceable to the National Institute of Standards and Technology (NIST) or by using NIST Standard Reference Materials where available.

Respor

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1481 of 1990

Certificate of CASELLA Conformance Model: Cel-25th Seriel No: al ob 4 244134	The instrument identified above has been manufactured, inspected and tested, in accordance with company drawings and specifications, and conforms to the standard(s) indicated below. IEC-61572: 2002 Class 1 Class 2 V IEC-61572: 2002 Class 1 Class 2 V IEC-60551: 1979 Type 1 Type 2 V IEC-60551: 1979 Type 1 Type 2 V IEC-60551: 1979 Type 1 Type 2 V IEC-50804: 2000 Type 1 Type 2 V ANSI S1.4: 1997 Type S(1) Type 2 V ANSI S1.4: 1997 Type S(1) Class 0 ANSI S1.11: 1986 (R1998) Type 0 Mandiacturers specification ANSI S1.25: 1991 Class 2 V	Company test equipment and acoustic working standards, used for conformance testing, are subject to periodic calibration, traceable to UK national standards, in accordance with the company's ISO 9001 Quality System.	CEL and Dawe instrumentation is manufactured by Casella CEL. Repent House, Woleseley Road, Kempston, Bodford, MK42 7JY, UK Phone: +44 (2) 1224 844100, Fax: +44 (0) 1234 841490, E-mail: info@caseltacof.com 17 Old Nashua Poad, #15, Amhersl, NH03021, U.S.A. Phone: +1 800 355 2966, Fax: +1 603 572 8053, E-motil: info@caseltause.com
Company test equipment and acoustic working standards, used for conformance lashing, are subject to parkodic calibration, traceable to diversity and second and with the company's ISO 900! Clusic Sustain Standards, in accordance with the company's ISO 900! Clusic Sustain Sustainable and second se	Certificate of Conformance CASELA Certificate of Conformance CEL110 Acoustic Calibrator CEL 110 Acoustic Calibrator CEL110 Acoustic Calibrator Modet CEL-110/2- Serial No: 07141445 Impended and testor for above rise base menufactured Finnwere: 2.000 The instrument Kenthed above rise base menufactured Serial Acoustic Calibration Impended and testor forms to the stendard(s) indicated below. CEL-110/1 Class 1 CEL-110/2 Class 2C IEC 60042: 2003 CEL CEL-110/2 Class 2C ANSI S1.40: 1994 (RI 1987) CEL		

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1482 of 1990 **3M Oconomowoc Personal Safety Division**

3M Detection Solutions 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.3M.com/detection 262 567 9157 800 245 0779 262 567 4047 Fax

An ISO 9001 Registered Company

Page 1 of 1

Certificate of Calibration

Certificate No: 5502360ESK100117

Submitted By

RAECO-LIC, L.L.C. 135 BERNICE DRIVE BENSENVILLE, IL 60106

Serial Number:

ESK100117

Customer ID: Model:

EDGE 5 DOSIMETER.

Test Conditions:

Temperature: Humidity:

18°C to 29°C 20% to 80%

Barometric Pressure: 890 mbar to 1050 mbar

SubAssemblies:

Description:

MICROPHONE BSWA MP418

Calibrated per Procedure: 53V735

Reference Standard(s) : I.D. Number Device B&K ENSEMBLE ET0000556 Measurement Uncertainty:

+/- 2.2% ACOUSTIC (0.19DB) Retinated at 95% Confidence Level (K=2) Date Issued: 12/2/2013 12/2/2014 Valid Until: Model Conditions: As Found: IN TOLERANCE As Left: IN TOLERANCE

11/20/2013

Serial Number: 493726

Date Received:

Last Calibration Date Calibration Due 5/10/2014 5/10/2013

Calibrated By:

1-Kesponsive^{/2/2013}

This report certifies that all calibration equipment used in the test is traceable to NIST, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of 3M Detection Solutions.

CERTIFICATE MAY **BE COPIED RETURN ORIGINAL**

098-393 Rev. 3

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1483 of 1990

3M Oconomowoc Personal Safety Division 39 Bet Avian Asia Ecospy 1060 Corporate Center Drive Oconomowoc, Wi 53066-4828 www.3M.com/detection 262 567 9157 800 245 0779 262 567 4047 Fax An ISO 9001 Registered Company

Page 1 of 1



Certificate of Calibration

Certificate No: 5502360ESK100118

Submitted By

RAECO-LIC, L.L.C. 135 BERNICE DRIVE BENSENVILLE, IL 60106

Serial Number:	29K100118	Date Received:	11/20/2013
Customer ID:		Date Issued:	12/2/2013
이렇게 안전 경험을 가지 않는 것 같아요.	EDGE 5 DOSIMETER	Valid Until:	12/2/2014
Test Conditions:		. Model Condition	15:
Temperature:	18°C to 29°C	As Found:	IN TOLERANCE
Humidity:	20% to 80%	As Left:	IN TOLERANCE
Barometric Pressure:	890 mbar to 1050 mbar		
a			

SubAssemblies:

Description:

MICROPHONE BSWA MP418

Calibrated per Procedure:53V735

Reference Standard(s): I.D. Number Device ET0000556 B&K ENSEMBLE Measurement Uncertainty:

+/- 2.2% ACOUSTIC (0.19DB) Estimated at \$5% Confidence Level (k=2) Serial Number: 493666

Last Calibration Date Calibration Due 5/10/2013 5/10/2014

Calibrated By:

Ion-Responsive 12/2/2013

This report certifies that all calibration equipment used in the test is traceable to NIST, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of 3M Detection Solutions.

CERTIFICATE MAY BE COPIED RETURN ORIGINAL

098-393 Rev. B

Posted to NGB FOIA Reading Room May, 2018 **BEST AVAILABLE COPY**

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1484 of 1990

TABLE 1 WIPE SAMPLING FOR LEAD INDOOR FIRING RANGE

ARMORY, LIBBY, MONTANA

MAY 23, 2014

Sample Number	Sample Location	Sample Results (µg/ft ²)	ARNG standard (µg/ft ²)
W1	Drill Hall Floor - Entrance	6.6	40
W2	Drill Hall Floor – Center	19	40
W3	Drill Hall Near IFR Exit Door	44	40
W4	IFR Hallway Floor	47,000	200
W5	IFR Firing Line Floor	24,000	40
W6	IFR Target End Floor	42,000	40

 $\mu g/ft^2 =$ micrograms per square foot < = not detected above the laboratory analytical limit

Bold = results above the ARNG standard



ANALYTICAL REPORT

Report Date: June 02, 2014

Ion-Responsive

R & R Environmental, Inc. 47 West 9000 South #2 Sandy, UT 84094

Phone: (801) 541-1035 Eav: (801) 402 7751



Workorder: 34-1414458 Client Project ID: Libby, MT Armory Purchase Order: NA Project Manager:

Lead	6.6	6.6	1.3		
Analyte	ug/sample	ug/ft ²	RL (ug/sample)		
Method: NIOSH 7300 Mod.	Samplin	Prepared: 05/30/2014 Analyzed: 05/30/2014			
Lab ID: 1414458001	Sampli	ing Location: Lit	bby, MT Armory	Received: 05/24/2014	
Sample ID: W1				Collected: 05/23/2014	
Analytical Results					

Lead	19	19	1.3	
Analyte	ug/sample	ug/ft ^a	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Sampling	Media: Gh Parameter: An		Prepared: 05/30/2014 Analyzed: 05/30/2014
Sample ID: <u>W2</u> Lab ID: 1414458002	Sampli	ng Location: Lit	by, MT Armory	Collected: 05/23/2014 Received: 05/24/2014

Lead	44	44	1.3	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Sampling	Media: Gho g Parameter: Area		Prepared: 05/30/2014 Analyzed: 05/30/2014
Sample ID: W3 Lab ID: 1414458003	Sampli	ng Location: Libb	y, MT Armory	Collected: 05/23/2014 Received: 05/24/2014

Lead	47000	47000	25	
Analyte	ugisample	ug/ft [*]	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Samplin	Media: Gh g Parameter: Are	STOP TON, BOARD STOP	Prepared: 05/30/2014 Analyzed: 06/02/2014
Sample ID: W4 Lab ID: 1414458004	Sampli	ing Location: Lib	bby, MT Armory	Collected: 05/23/2014 Received: 05/24/2014

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, 84123 USA | PHONE +1 801 266 7700 | FAX +1 801 268 9992 ALS GROUP USA, CORP. An ALS Limited Company

www.alsglobal.com

FIGHT SOLUTIONS FUCHT PARTING

Environmental 🔙

BEST AVAILABLE COPY Mon, 06/02/14 4:18 PM

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau/HREP-V11.2 Page 1486 of 1990

2. Date 5/23/14	4458 S Purchase Order No.		1. REGULA	CAL REQUEST FORM	
Address <u>47</u> Sandy Person to NOT Fax Telep E-mail Ad Billing Adv	REAVISONMA Nest 9000 5 , UT 8407	0		ALS Project Manager 5. Sample Collection Sampling Site <u>Libhy</u> , <u>M</u> T <u>Ay</u> <u>MO</u> Industrial Process <u>M</u> Date of Collection <u>5/23/19</u> Time Collected <u>1000</u> Date of Shipment <u>11 av d Cafry</u> Chain of Custedy No. 6. How did you first learn about ALS?	
7. REQUEST FOR ANALYS Laboratory Use Only	Client Samplo Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Use method number if known	Units**
	WI	Wipe	IFA	Total Lead	
	w2	wipe	14.12	Toral brad	1
	W3	wipe	1472	Total Lead	1
	h4	Wip-	1472	Total Land	1
	115	Wine	1470	Toral Long	1
	46	Wipe	14.72	Toral Lead	l
			-		

* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soil; Water; Other ** 1. μg/sample 2. mg/m³ 3. ppm 4. % 5. μg/m² 6. (other) Please indicate one or more units in the column entitled Units** Comments

	· · · · · · · · · · · · · · · · · · ·
	Dato/Time_5/23/14 2100
Received by	_Dete/Time \$724/14 500
telinguished i	Date/Time
Received by	Date/Time
960 West LeVoy Drive / Salt Lake City, UT 84123	800-356-9135 or 801-266-7700 / FAX: 801-268-9992

ALS Environmental

BEST AVAILABLE COPY



Non-Responsive

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1488 of 1990

		BEST AVAILABL	E COPY		
REFERENCES	29 CFR 1910 1026(h)(1) and NG PAM 420- 16	NGR 385-15, Section 2-3(a) and NG PAM 420-15 (Conversion or Closure IFR)	General Duty Clause 5(a)(1) and NG PAM 420- 15	Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations	ARNG-CSG-P Memo Dated 14 November 2013 (ARNG Maintenance Shop Locel Exhaust Ventilation Measuremnts)
DATE				10	
Estimated Cost(s)					
ACTION	-				±;
SUSPENSE					
HAZARD COUNTERMEASURE	Clean the IFR and floor areas exceeding the IHSW clean-up standard in accordance with the IHSW Armory Clean-up SOP to reduce lead concentrations below the 40 µg/ft2 and the 200 µg/ft2 IHSW SOP criterion level	Indoor firing ranges shall not be used for any purpose other than fining (i.e., they shall not be used for classrooms, exercise rooms, storage, etc.). Close or convert Indoor Fining Range,	Post warming signs on Entryway doors for Potential Lead Dust Exposure to pregnant females, females or of child bearing age and children. Property close or convert non-active Indoor Firing Ranges.	Update all MSDSs for the facility with the new SDS format.	Install ventilation system that draws 850 CFM for turbo charged vehicles.
RAC	N	CV.	en.	4	(Ø)
SITE	IFR	IFR	N.	Armory, Libby, MT	Maintenance Bay
HAZARD DESCRIPTION	The analytical results for lead wipe sampling indicated levels greater than the 40 µg/ft2 criterion or the 200 µg/ft2 criterion specified by the IHSW SOP and the ARNG	The IFR has not been properly cleaned or converted	The IFR hallway door is kept locked. However, there are not warning signs posted.	MSDS files not updated to current SDS GHS Standard	Both of the exhaust ventilation drop flow rates measured in the maintenance bay did not meet the ARNG minimum recommended requirements for a 500 HP icling engine.
	RECURRING EVENT MTLACIFR- 052314-4.1.1	RECURRING EVENT MTLACIFR- 052314-4.1.2	RECURRING EVENT MTLACIFR- 052314-4,1.3	MTLACIFR- 052314-4.6	MTLACIFR- 052314-4.7.1

Industrial Hygiene Southwest Violation Inventory Log

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1489 of 1990

Defension DA COBB ATCA

Page 1 of 2

BEST AVAILABLE COPY

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for the facility. The paragraphs are numbered to correspond to the report sections where noted.

4.1.1 Lead Wipe Sampling - The analytical results for lead wipe sampling indicated levels greater than the 40 μ g/ft2 criterion or the 200 μ g/ft2 criterion specified by the IHSW SOP and the ARNG.

Clean the IFR and floor areas exceeding the IHSW clean-up standard in accordance with the IHSW Armory Clean-up SOP to reduce lead concentrations below the 40 μ g/ft2 and the 200 μ g/ft2 IHSW SOP criterion level. This is a recurring event.

4.1.2 Lead Wipe Sampling - The IFR has not been properly cleaned or converted.

Indoor firing ranges shall not be used for any purpose other than firing (i.e., they shall not be used for classrooms, exercise rooms, storage, etc.). Close or convert Indoor Firing Range. <u>This</u> is a recurring event.

4.1.3 Lead Wipe Sampling - The IFR hallway door is kept locked. However, there are not warning signs posted.

Post warning signs on Entryway doors for Potential Lead Dust Exposure to pregnant or females or of child bearing age and children. Properly close or convert non-active Indoor Firing Ranges. This is a recurring event.

4.6 Hazard Communication and Hazardous Materials Storage – The SDS file is still listed as MSDS since the Globally Harmonized System (GHS) Classification of Labeling Chemicals has just taken effect on January 1, 2014 and the documents are still MSDS documents.

Update all MSDS for the facility with the new SDS format.

4.7.1 Ventilation Survey – Both of the exhaust ventilation drop flow rates measured in the maintenance bay did not meet the ARNG minimum recommended requirements for a 500 HP idling engine.

Install ventilation system that draws 850 CFM for turbo charged vehicles.

4.7.2 Ventilation Survey – The kitchen ventilation hood either did not operate when the switch was thrown or some other action needed to be taken.

Either repair the kitchen ventilation hood or post operating instructions indicating how to initiate the ventilation hood.

4.11 General Safety Walkthrough – The eyewash station/deluge shower in the shop area is not equipped with an alarm system.

Install an alarm system on the eyewash station/deluge shower in the shop area.

- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash ACU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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. <u>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.</u>

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.

	Intellicode	IH Visit				Annual
		Qty	Q1	02	03	
athing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04	c			. >	
Brzathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04				< >	
er of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05	0			< >	
er of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05	0			< >	
er of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06	0			< ×	
er of Noise Sound Level samples collected >= 140 dBP	953-01-06	0			×	
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are	953-01-07	0			×	
0	953-01-07	0			×	
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled, that are recommended for control	953-01-08	0			×	
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled	953-01-08	0			×	BE
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09	0			×	ST AVA
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09	0			×	ILAE
Total number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	N/A	N/A	NIA	NIA	BLE CO
Total number of DOEHRS-IH shops coded as Priority 1	953-02-10	N/A	N/A	NIA	N/A	N/A
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	THI	보	H	H	THI
Number of buildings requiring a basic industrial hygiene characterization within the last 12 ments	953-02-11	H	H	Ħ	片	LHI
er of buildings for which all processes requiring a basic industrial hygiene terization have received one within the last 12 months.	953-02-12	H	Ŧ	H	L L	H
ម្លើមិនាber of buildings requiring an industrial hygiene exposure assessment within the last 12 ស្រីសាវhs	953-02-12	TH	보	H	H	H
er of processes that were assessed for potential inhalation exposure to employees this IH Visit	953-02-13	0			×	

Number of processes that require an assessment for potential inhalation exposure to	953-02-13	0	×	
Nomber of processes that were assessed for potential inhalation exposure to employees	953-02-14	0	×	
Nomber of processes that require an assessment for potential inhalation exposure to erroloyees within the last 12 months.	953-02-14	0	< ×	
Namber of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	0	×	
Namber of personnel who required reassessment by industrial hygiene within the last 12 menths.	953-02-15	0	×	
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	0	×	
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	0	× ×	
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	0	× ×	BES
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	0	: ×	T AVAIL
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18		< ×	ABLE C
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18	0	< ×	OPY
Number of ventilation systems which require corrective action based on deficiencies identified during an IH survey	953-02-19	e	×	
Number of ventilation systems which were evaluated by an IH	953-02-19	0	×	
Number of design review packages evaluated and addressed by an IH with recommendations	953-02-20	0	×	
aughter of design review packages which required IH evaluation and recommendations	953-02-20	0	× ×	

Record #J-15-0085 (MT) Hey National Guard Bureau Page 1496 of 1990

DEPARTMENT OF THE ARMY MONTANA ARMY NATIONAL GUARD Armory 1004 Treasure Avenue Libby, Montana 59923

1. Date Prepared: 23 MAY 2014

 Names (and Company Name) of Personnel Conducting Industrial Hygiene Site Assistance Visit: Non-Responsive &R Environmental, Inc., 47 West 9000 South, Suite #2, Sandy, Utah 54070

3. Facility Name and Brief Summary of Primary Activities Conducted at Facility: Armory, Drill assemblies and Level 10 maintenance and inspections of National Guard vehicles.

4. Facility Address: 1004 Treasure Avenue, Libby, MT 59923

5. Primary Unit Assigned to Facility: Detachment 1, 639th CSSC

6. Co-Tenant Units Assigned or Working Within Facility (LIST ALL): None

7. Square Ft. Area of Facility: 35,000.

8. Work Schedule: Mon-Fri, 0700-1630 Monday through Friday

9. Number of work bays: 2 work bays

10. Equipment Density and Type:

a. List Equipment Nomenclature Serviced or Maintained at Facility: See Attached

b. List Total Number for Each Nomenclature Serviced or Maintained at Facility: See Attached

- 11. Total Number of Personnel: 2
- No. of Admin. Personnel (Include Status AGR, Fed. Tech., IDT, State or Contract Employee): 2 AGR
- No. of Maintenance Personnel (Include Status AGR, Fed. Tech., IDT, State or Contract Employee): 0
- 14. Total Number of Personnel Enrolled in the Hearing Conservation Program: 0
- 15. Total Number of Personnel Enrolled in the Respiratory Protection Program: 0

BEST AVAILABLE COPY

1	Ĩ			-	1		Γ	1	L	I		
SEC	VEH MODEL #	BUMP NO	BUMP NO VEH ON HAND Y/N	RADIO MT IN	N/A 1SNI LV	SNR	REG #	IN	RADIO SET	RADIO SER #	RADIO MT SER#	AMP SER #
108	WIND HWWW	QM8AL	1. 1. 1. 1. V. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.	Period Con	Y 1>	194358	NGSOFB	T61494/T07679	AN/VRC-905(C	ASMAR .	A1001	100001
109	WWWH 7601M	IN9A1	A Start Y and		Y	194351	MGSDF6	T61494/T07679		200405	TECTH	102920
601	M1087A1 EXPANDO	QM982	· · · · ·		4	10TANHFF8CS743090	NL2CRU	T41271/167139	-	- BORNON	-00076	71/761
60	POWERPLANT 30KW	199M0	· · · · · · · · · · · · · · · · · · ·		- AND -	T-96-078-129	VCIMCF	P42126		COLINY	TOOTIs	1235021
10	M1078A1P2 LMTV	CMIOB1	Y	South State	12. Jacob	10TBMAU54BS723197	NH25AU	T60081/T59448	AN/NRC-88FIC	260503	DINCA -	NIX
00	M1078 LMTV	QM10B2	Sec. Xalara	1.1	14 - 1 - E -	AT0201968FDN	NHO7AE	T60081		260504	. UCUCY	VN
1100	M1088 TRCTR	QM10B3	Y	Dier de	SUDJOUT	T0202258FDN.	NLIGTL	T61239	ANA/RC-90FIC	260507	DUDCY	NN NN
DIT	M1120A2 LHS	QM10C3	Υ.	Children -	Assessment.	10T-G/6Y1X8S101179	NP1Z00	T39518	AN/NRC-905/C	JENAGN	CONTE	torate .
III	M1120A2R1 LHS	QM10C4	Y	Collins.	- POCINE	10T-2K1J25H1031836	NP1W/MB	T39518	AN A	DEMAG	20004	193084
OIL	M1120A2R1 LHS	QM10C5	Y	Say Con	Provincial and a	107-2K1/27/1035991	NPIWML	T39518	AN/NBC-90F(C	COLONZ COLONZ	- PUDCY	ATTEST
110	FORK LIFT 10K	QM10F1	Sector States	C. T. Halle	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	10KB1182	-WULDUT2	173347			LONAL	harear
OFT	FORK LIFT 4K	QM10F2	z			U002760	NPDAAD	T49255/T49119			ALC: 4020140	
010	M871 step deck TRL	LTOIMD.	Y	and the second	Succession Section of the	55V-2412A-X-85900896	NX14H7	S70027	Nacional Line	ALCONDED	A THE MARKET AND A	
110	MI076 PLS TRL	QMI0T2	Y	でいたいないの	No. Start	1112660	NW278G	T45465/T93761				
110	M1076 PLS TRL	QM10T3	N								ALL NO LOS AND	
110	M1076 PLS TRL	QM10T4	Z									
110	RT240/ RTCH	QMIORI	Z									
2	M1120A2 LHS	QM11C1	N					K				
日日	M1120A2 LHS	OM11C2	N						-			Ì
110	FORK LIFT 4K	QM11F1	N									
TIT	M1076 PLS TRL	UTLINO	and the Wartheaster	S. Carlo	のないないない	1112319	NW77E2	TASA65	A THE PLAN PROPERTY OF THE PAGE	10 10 10 10 10 10 10 10 10 10 10 10 10 1	We will be an interest	
111	M1076 PLS TRL	QM11T2	N						C. M. Contraction of the Contrac	and the second s	a scriptor of and a	1.
112	- M1078 LMTV	QM1281	The second second	ACCOUNT OF	Contraction (Contraction)	AT 009189BDEG	NH04MR	. T60081	AN/NRC-90FIC	260536	42040	- osones-
112	MI088.TRCTR	QM1282	Are here and	ALC: NO.	1800-1-1980	T0202248PDN	NLIGTK	T61239	AN/NRC-90FIC	260541	STOP	2100EG
112	FORK LIFT 6K	CM12F01	See Ball & Sec. Sec.	5-12-12-12	al - and the -	6000M3A2093	WLDD68-	T73347/T48944			16VAU	OCCETC
1.12	FORK UFT 4K	QM12F02	N							State of the second second		
2	1	OM1271	ATH NOT A REPORT	1.1.1.	COM REAL	13N-2412A-5-55926859	NX11JP	570027	SUPERIOR STORE	othe Cardination of the	V room and room	1000
113	>	QM13A1	1 V. V	100	6 1 S	179702	NZ1A66	T61494	AN/NRC-90F(C	025499A	42018	819063
113	M1101 TRL	UN13T1	Sector New Sector	大学などろ	Sec. Site	26875	NW2B1M	T95992	and the second second			PACTA A

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1498 of 1990

BEST AVAILABLE COPY

May, 2018

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Porc
Are any weapons cleaned in the facility, if yes where are they cleaned?	No
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	NA.
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	IFR NOT conversed Pone
Is there any peeling paint? Take bulk sample if able.	Nor .
Are there any signs of water damage or mold?	No .
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	Y=5-
Quality of housekeeping	# Exerlinit
HVAC maintenance plan in place?	Yes sub convect
Overall condition of HVAC system	(900d.
Obtained CO2, Temp, RH monitoring	Don
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	X-os
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	Y-5

1.7.1

Fire alarm in working conditionnot usually in place in older armories	Y-s .
Fire extinguishers in place and properly identified and mounted	Y-5
Evidence of monthly fire extinguisher inspections	Y-s
Annual fire extinguisher inspections tags current	Yrs
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	Yes
Egress routes accessible and properly markednoted on <u>Fire Evacuation Plan</u>	Yes
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	No HezCony .
Any Photo labs	No
Any hazardous noise sources	NA
Light levels checked throughout building	NA Dare
Breaker panels properly labeled with no exposed wiring	checked .
Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.?	2 AGR 1 Recountry 9 civ Admin
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	# Yos O crasionally
Obtain two lead air samples	On IHSW Request Only

Evaluate Krichen Stove Hood Flow if Bresent IA W NFPA Standard 96.	Could Nor Get to opprave
Collect Source Noise Measurements of Ritchen Appliances and Document Using DD 2214	
	Contraction of the Contraction o
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	Pone
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	pone.
Name of Armory, POC, phone #, address and organizations in Armory	obtained
02/ ¹⁺⁰ 10	
(Add Checklist to Report)	(Add Checklist to Report)
And the research of the second s	

.

Army National Guard IAQ Checklist

•3

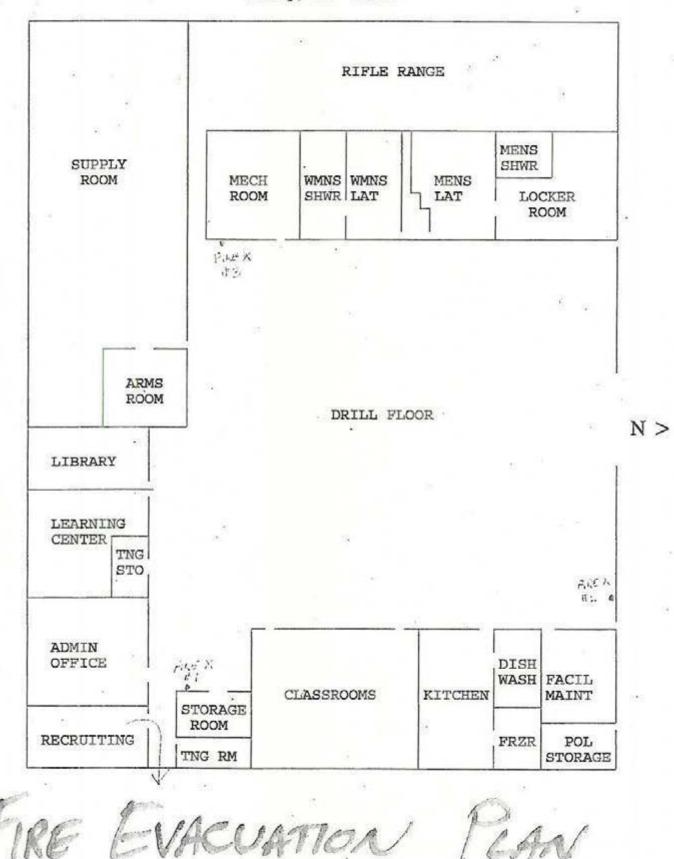
General Info Name and address of facility with Zip code, POC's name, phone #, Military organization.	obrained .	
Shop Layout – clearly depicting location of operation identified in the survey. Fire evacuation plan.	Porp	· ·
Mcchanical Room: check for dampness, bird/mice droppings, general cleanliness, make-up airflow, chemical/disinfectant storage, etc., spills, leaks (oil, steam), Operating schedule (up and down times), Humidification and what kind.	& 000d	
HVAC system: checkdrip pan (dampness, mold, etc.), filters, coils, dampers (bird screens)	Gad	
Outside building: checkprevailing winds, outside air vents for HVAC, traffic near vents	por	
Inside building: check—Temp (69-79 F), RH (30-60%), CO2 (700ppm+ outside reading) should not exceed this, CO (0- 2ppm), Outside Airflow (20cfm/person)	Done	
Additional Inside building info: check— partitions blocking airflow, ceiling tile (dampness, stains, breaking down), diffusers (open, blocked, diverted), smells (mold, perfume, chemical, etc.), new furniture, additions, carpet, carpet cleaning, new cleaning products (general housekeeping practices), to hot, cold, dry, moist.	& checked	
Ventilation – survey of all general and local ventilation systems	Qoud.	
Overall condition of HVAC system and maintenance plan.	Qoud. Good Nore	
Obtained CO2, Temp, RH monitoring	Nore	
Provide Photographs of exterior / interior of each facility, each ventilation system any other areas or conditions pertinent to the survey	Done	

Check building occupancy: How many military personnel, how many civilian personnel	3AGR PCiu
Any civilian activities in facility (cub scouts, classes, day care, parties etc)	Ves Occesional Parties
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	Dune
Sampling – (Air) shall be conducted to ensure employees are not being exposed to any occupational health hazards – (Bulk) whenever applicable, e.g., paint chips, carpet, paneling – (Wipe) whenever applicable, e.g., floors (break room, general work), Scotch Tape samples for molds	Lead wipe only
Submit final written report within 30 days after receipt of sample results. Which includes: 4 <u>comb bound</u> final reports with attachments, CD of each facility surveyed, POC , phone # and facility address included <u>in Introduction</u> portion.	
Appendices – should include: <u>Shop layout</u> with locations of measurements of local and general exhaust fan; sampling & ventilation data and this <u>Checklist</u>	

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1503 of 1990

BEST AVAILABLE COPY Det 1 HHC 2-163d Cavalry Battalion Montana Army National Guard 1004 Treasure Ave Libby, MT 59923



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1504 of 1990



Guam • Hawaii • California • Oregen • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Mexico • Nebraska

Industrial Hygiene Site Assistance Visit

Livingston Armory Indoor Firing Range (IFR) 24 Fleshman Creek Rd. Livingston, MT 59230

13 AUG 2013

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1505 of 1990 Industrial Hygiene Southwest's mission is to ensure all military personnel and military leadership is provided the specialized technical expertise, consultation and assistance to ensure all military operations and processes are conducted in a healthy manner

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1506 of 1990



DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superformess Ave, Ste. C Mather, CA 95655

ARNG-CSG-P

22 October 2013

MEMORANDUM THRI NON-Kesponsive S, 1956 Mt. Majo St., Room 1009, Helena, MT 59636

FOR Commander Livingston Armory Indoor Firing Range (IFR) at 24 Fleshman Creek Rd, Livingston, MT on 13 AUG 2013

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Livingston Armory Indoor Firing Range (IFR) at 24 Fleshman Creek Rd, Livingston, MT on 13 AUG 2013.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Livingston Armory Indoor Firing Range (IFR) at 24 Fleshman Creek Rd, Livingston, MT on 13 AUG 2013.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1507 of 1990

ARNG-CSG-P

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Livingston Armory Converted Indoor Firing Range (IFR) at 24 Fleshman Creek Rd, Livingston, MT on 13 AUG 2013

a. Follow NGP 420-15 on <u>Conversion of Indoor Firing Ranges</u> (IFR), that which states ventilation systems, backstop (bullet trap), and anything on the walls or floors should be removed during conversion. <u>Remove</u> lockers, backstop, target retrieval system and stored items, <u>Cleaning of stored</u> <u>items is required</u>, prior to removal, <u>to prevent migration of lead</u>. Clean all of the IFR and areas identified during the SAV as being above 40 ug/ft2. Once this has been cleaned, clean-up wipe samples should be taken to ensure the 40 ug/ft2 or less is acquired. The proper sealant should then be applied & painted then additional samples should be taken by your Industrial Hygiene Technician, or a impartial person or your Regional Industrial Hygiene office. (para. 4.1.5) (RAC 2)

 <u>Record fire extinguishers inspections</u> which should be done monthly and annually, with documentation on extinguisher tag. (para. 5.6.1) (RAC 4)

c. <u>Post warning signage</u> at the entryway(s) of the facility and on Converted IFR door(s) to warn pregnant or nursing females and children under 7 years of age that there is a potential for a lead dust exposure in this facility/area. Make sure staff and maintenance personnel are aware of the associated hazards of lead exposure. (para 4.1.10 & 4.1.8) (RAC 3)

d. <u>Improve housekeeping practices</u> and utilize SOP included to help prevent migration of noted lead dust in this Converted IFR. A <u>thorough cleaning of the IFR</u> should be accomplished before continuous use of this Converted IFR. Areas noted to be above 40 ug/ft2 should get special attention and areas should be <u>retested</u> once thoroughly cleaned as noted in NG Pam 420-15 (Conversion of Indoor Firing Ranges). (para. 5.3) (RAC 2)

e. Replace the burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color to help improve lighting in Converted IFR. (para. 4.1.2) (RAC 4)

f. Determine the source of the <u>water damage</u> in the Converted IFR and if repairs are necessary. Perform repairs as needed with the knowledge of potentially lead impregnated materials if repairs or removal of materials happens. (para. 4.2.2) (RAC 4)

g. Ensure the staff and anybody going into the Converted IFR are aware of the associated hazards for lead.

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

Corrective measures should be implemented and accomplished at the lowest levels possible.
 Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1508 of 1990

ARNG-CSG-P

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Livingston Armory Indoor Firing Range (IFR) at 24 Fleshman Creek Rd, Livingston, MT on 13 AUG 2013

 Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

4. Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

 The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the <u>Senior Unit Commander of this Facility and any Co-Tenant Organizations or</u> <u>Units, review and provide assistance with implementation of these recommendations.</u> This will

ARNG-CSG-P

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Livingston Armory Indoor Firing Range (IFR) at 24 Fleshman Creek Rd, Livingston, MT on 13 AUG 2013

educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the MGB/NGB/NSW office at (916) 854-1491 or via email at

Non-Responsive

Non-Responsive

NGB, IHSW, CIV Industrial Hygiene

SCUARD -	LOG OF SCHEDULE OF CORRECTIV	F CORR	ECTIV	Violation Inventory Log VE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Livingston IFR, Livingston MT	E WITH SAFE	ETY AND HE	ALTH STAN	DARDS	ł a
CONTROL NUMBER	HAZARD DESCRIPTION	SITE	RAC	CORRECTIVE ACTIONS (Abatement Plan)	SUSPENSE	ACTION OIC/NCOIC	Estimated Cost(s)	DATE CORRECTED	REFERENCES
R-081313-	Illumination is insufficient	R	4	Replace the burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.					NGR 385-15 2-2 c (1)(b);
MTLVIFR-081313- 4.1.5	Lockers and excess office and kitchen equipment is stored in the range	IFR	8	Remove lockers and stored items, until the IFR is officially converted. Cleaning of stored items is required, prior to removal to prevent migration of lead.					NGR 385-15 2-3 b
MTLVIFR-081313- 5.3	Recurring Observation: Lead concentrations exceed established concentration.	Η	N	Clean the entire IFR and materials stored within using cleaning procedures outlined in NGR 385-15, 5-4. Improve housekeeping practices to help prevent migration of lead dust related to IFR and potentially previodic weapons cleaning episodes.					29 CFR 1910.1025 (h)(1) & General Duty Clause 5 (a)(1)
MTLVIFR-081313- 4.1.6	Dry sweeping is performed in the range every two weeks.	ΕË	3	Do not dry sweep the range. Use the housekeeping procedures outlined in NGR 385- 15, 5-4 to perform cleaning. Utilize Armory Clean-Up SOP included in this report.					NGR 385-15 2-4 e
MTLVIFR-100912- 4.1.10	Staff were not aware of lead hazards in the IFR.	IFR	n	Ensure that staff or maintenance entering the IFR are aware of the associated hazards including lead.				u L	29 CFR 1910.1200; 29 CFR 1910.1025
-VIFR-100912- 4.4.1	MTLVIFR-100912- Fire extinguisher past due for 4.4.1 monthly inspections	IFR	4	Perform and document monthly inspections of fire extinguishers as required.					29 CFR 1910.157 (e)(2)
Reference DA FORM 4754	RM 4754	-		realinhai se				-	- 65

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1511 of 1990

BEST AVAILABLE COPY

AFTEN X	LOG OF SCHEDULE OF CORRECT	OF CORR	ECTI	Violation Inventory Log IVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Livingston IFR, Livingston MT	E WITH SAFI ton MT	ETY AND HE	ALTH STAN	DARDS	•
CONTROL				COBBECTIVE ACTIONS	CIICDENCE	ACTION	Fetimator	DATF	
NUMBER	HAZARD DESCRIPTION	SITE	RAC	(Abatement Plan)	DATE	OIC/NCOIC	Cost(s)	CORRECTED	REFERENCES
CLOSED X				from a subsection of	110010				
MTLVIFR-100912- 5.c Executive Summary	IFR-100912- Executive Potential lead exposure ummary	Armory	9	Warring signs should be posted on facility entryway doors and the Converted IFR doors, in order to help protect personnel mainly children under 7 years of age and pregnant or nursing females				-	General Duty Clause 5 (a)(1) & 29 CFR 1910.1025 (h)(1)
MTLVIFR-100912- 4.4.2	Water damaged celling tiles	ER.	e	Determine the source of the water damage and if repairs are necessary. Perform repairs as needed with the knowledge of lead contamination in the ceiling tiles material.					Prudent Industrial Hygiene Practice; ANSI Z4,1-1986

Industrial Hygiene Southwest

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1512 of 1990

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> 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.

- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- Final rinse should be with clean water only -after mop heads have been cleaned.

<u>Recommended Follow-up Housekeeping Practices</u> 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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)

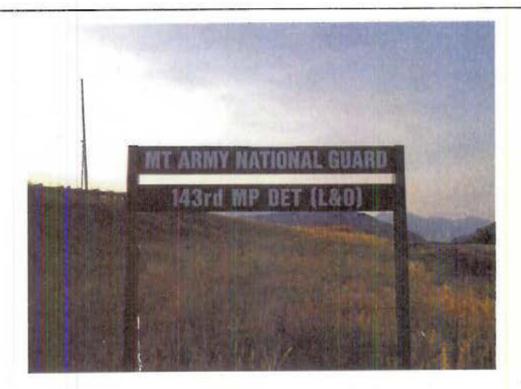
NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

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.

Industrial Hygiene Site Assistance Visit Livingston IFR Livingston, Montana 13 August 2013







Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1517 of 1990

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

LIVINGSTON INDOOR FIRING RANGE (IFR) 24 FLESHMAN CREEK ROAD LIVINGSTON, MONTANA 59230

August 13, 2013

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared hy: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1449.13



Environmental Health and Sujery Specialist



maustrial riggientsi

Reviewed by:





Industrial Hygienist Program Manager

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1518 of 1990

TABLE OF CONTENTS

EXEC	CUTIVE	SUMMARY
1.0	INTR	ODUCTION
	1.1 1.2	Objectives
2.0	PROC	cess Description
3.0	MET	HODS
	3.1 3.2 3.3 3.4 3.5 3.6 3.7	Personal Breathing Zone Air Sampling
4.0		ERVATIONS AND RECOMMENDATIONS
	4.1 4.2 4.3	Physical Safety Inspection.74.1.1Building Envelope.74.1.2Range Lighting.74.1.3Bullet Traps.84.1.4Targets and Target Carriers.84.1.5Range Use.84.1.6Range Maintenance.84.1.7Personal Protective Equipment (PPE).94.1.8Posting of Signs.94.1.9Range SOP.94.1.10Record Keeping.9Ventilation Inspection.10
5.0	SAM	PLING RESULTS
	5.1 5.2 5.3 5.4 5.5 5.6	Personal Breathing Zone Sampling 11 Ventilation 11 Lead Wipe Sampling 11 Illumination 12 Indoor Air Quality 12 Other Observations 12
6.0	PRO	ECT LIMITATIONS
7.0	PRO.	ECT APPROVAL

2

APPENDICES

Appendix A	References
Appendix B	Assessment Criteria
Appendix C	Photo Log
Appendix D	Chemical Inventory
Appendix E	Floor Plan /IAQ - Temp, RH, & CO2 Monitoring
Appendix F	Ventilation Data
Appendix G	Field Notes
Appendix H	Calibration Certificates
Appendix I	Analytical Data Tables
Appendix J	Laboratory Reports
Appendix K	Employee List
Appendix L	IHSW Violation Inventory Log
Appendix M	Hazard Assessments
Appendix N	Recommendations
Appendix O	DD Forms 2214
Appendix P	Installation Status Report
Appendix Q	Indoor Firing Range Inspection Checklist
Appendix R	Safety Related Observations
Appendix S	Noise Dosimetry Data
Appendix T	Additional Supporting Documentation

IHSAV Livingston Indoor Firing Range Livingston, Montana Posted to NGB FOIA Reading Room May, 2018 iii.

NES, Inc. NES Job Number: 013.IH1449.13

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1520 of 1990

EXECUTIVE SUMMARY

On August 13, 2013, **Non-Responsive** ssociate Industrial Hygienist, and **Certified** Industrial Hygienist (CIH) of Network Environmental Systems, Inc. (*NES*), conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Livingston Indoor Firing Range (IFR), located at 24 Fleshman Creek Road in Livingston, Montana. The primary point of contact (POC) for information gathered during this survey was **Non-Responsive** who can be reached by phone at (406) 324-5060 or by email a **Non-Responsive**

The objectives of this IHSAV were to perform the following activities:

- · Evaluate work processes conducted within the facility;
- Collect metal surface wipe samples;
- Assess the IFR;
- Measure illumination levels;
- Collect indoor air quality data;
- Evaluate existing safety hazards; and
- Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: Non-responsive ent above and beyond expectations to assist NES and provide information necessary to complete the IHSAV.

IHSAV Livingston Indoor Firing Range Posted to NGB FOIA Reading Room May, 2018 Page 1 of 14

NES, Inc. NES Job Number: 013.IH14449.13

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1521 of 1990

1.0 INTRODUCTION

On August 13, 2013, Non-Responsive ssociate Industrial Hygienist, and Certified Industrial Hygienist (CIH) of Network Environmental Systems, Inc. (*NES*), conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Livingston Indoor Firing Range (IFR), located at 24 Fleshman Creek Road in Livingston, Montana. The primary point of contact (POC) for information gathered during this survey was Non-Responsive who can be reached by phone at (406) 324-5060 or by email at Non-Responsive

1.1 Objectives

The primary objective of the IHSAV was to conduct hazard evaluations of work processes and asses the IFR. Processes and activities at the facilities were evaluated and recommendations to control the existence and extent of potentially hazardous operations or conditions at the Army National Guard (ARNG) facility were documented accordingly (Reference Appendix M – Hazard Assessments). This IHSAV will serve to establish a baseline Hazard Assessments (HA) / Job Safety Analysis (JSA) of workplace and process conditions or update/validate a previous HA/JSA so a worker's history of exposures, or potential exposures is provided for each civilian and military employee.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- Evaluate work processes conducted within the facility;
- · Collect metal surface wipe samples;
- Assess the IFR;
- Measure illumination levels;
- · Collect indoor air quality data;
- · Evaluate existing safety hazards; and
- Review safety policies/programs, training, and record keeping.

Posted to NGB FOIA Reading Room May, 2018 Page 2 of 14 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.1H1449.13 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1522 of 1990

2.0 PROCESS DESCRIPTION

The Livingston IFR is located within the Livingston Armory. The Armory was constructed in approximately 1989. The 143rd Military Police Detachment is assigned to the Livingston Armory, Unit Identification Code Forty five (45) personnel are authorized for and employed at the Armory. The facility work schedule is Monday through Friday 0800 to 1700. The Livingston Armory administrative personnel consist of two Active Guard Reservists. The IFR is not actively used as a firing range. Personnel have converted the space to a locker room and storage area. However, lead wipe samples indicate the space has not been sufficiently cleaned of lead prior to repurposing.

IIISAV Livingston Indoor Firing Range Posted to NGB FOIA Reading Room May, 2018 Page 3 of 14 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.1H1449.13

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1523 of 1990

3.0 METHODS

3.1 Personal Breathing Zone Air Sampling

Personal breathing zone air sampling was not conducted during the ISHAV.

3.2 Ventilation

The IFR has a plenum wall where air is blown into the space. The air velocity at the 5 shooting lanes was evaluated during the IHSAV. Air velocity measurements were obtained using a TSI VelociCalc Plus, model 8386A. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.3 Lead Wipe Sampling

Lead wipe samples were collected from horizontal work and floor surfaces in various locations throughout the IFR. Ghost Wipe[™] brand wipes were used by wiping a one (1) square foot (ft²) template. The collected wipe samples were placed in clean and labeled plastic centrifuge tubes and promptly sealed upon collection. Samples were submitted to ALS Environmental Laboratory, located in Salt Lake City, Utah to be analyzed for lead in accordance with NIOSH method 7300. The wipes used conform to American Standards for Testing Materials E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.

The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot $(\mu g/ft^2)$ as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 $\mu g/ft^2$ is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

3.4 Illumination

Illumination measurements were taken throughout the Livingston IFR using a Konica Minolta light meter, model TL-1. To provide information on the overall lighting conditions

IIISAV Livingston Indoor Firing Range Posted to NGB FOIA Reading Room May, 2018 Page 4 of 14

in the IFR, measurements were taken from the surfaces of typical work locations and at waist level from selected locations. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.5 Indoor Air Quality

Carbon dioxide (CO₂), temperature, and relative humidity were measured using a TSI IAQ Calc, model 7545. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. Human occupants produce CO₂, water vapor, and other bioeffluents. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, *Ventilation for Acceptable Air Quality*, recommend maintaining CO₂ below a concentration that is 700 parts per million (700 ppm) above outdoor levels. Outside CO₂ concentrations typically range from 300 to 400 ppm. Providing sufficient ventilation to maintain steady-state CO₂ concentrations at this level will assure that a substantial majority of people entering a space will be satisfied with respect to human bioeffluents (body odors). A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.6 Equipment Used

Туре	Model Number	Serial Number	Calibration Date
Konica Minolta Illuminance Meter	TL-1	90480719	05/2013
TSI VelociCalc Plus	8386A	54110581	03/2013
TSI IAQ-Calc	7545	T75450846008	11/2012

The following equipment was used for this survey.

Please see Appendix H for a complete inventory of calibration certificates that may have been used during this IHSAV.

3.7 Quality Assurance

NES employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- · Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;

Page 5 of 14

- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and,
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

4.0 OBSERVATIONS AND RECOMMENDATIONS

The Indoor Firing Range Inspection Checklist provided by the Army National Guard was used extensively in the preparation of this section. A copy of the Checklist can be found in Appendix Q. In general, several aspects of the IFR were found to be in non-compliance with existing standards for IFRs. However, the IFR is not currently used as a live fire range. Items of non-compliance with IFR standards are provided in the event the facility decides to utilize the space as an operational IFR in the future. In such instance, the items of non-compliance would need to be addressed prior to operation of the IFR.

4.1 Physical Safety Inspection

4.1.1 Building Envelope

The building envelope was reviewed as part of the Indoor Firing Range Inspection Checklist established by the Army National Guard. Each of the five firing lanes was measured to be at least four feet wide as required. Pipes, conduits and walls are sealed and baffled or covered to prevent the migration of lead and ricochets. Open floor drains were not observed. There are no carpets, drapes or fiber-like material in the range. Excluding the access door behind the plenum wall, there are no doors or windows in front of the firing line. There are no protruding edges on the floor, walls or ceiling, and the interior mortar joints are flush with the interior surface. The walls and roof of the IFR provide ballistic security. The plenum wall was supported and thick enough to avoid flexing of the wall. The entrance door to the range is weather-stripped, however one corner of the stripping has deteriorated and allows light to pass through.

4.1.2 Range Lighting

Illumination was measured at the targets and found to range between 6.39 and 34.0 foot candles (FC), less than the 100 FC required for IFRs. Illumination in other areas in the IFR ranged between 3.39 and 24.5 FC, less than the minimum of 30 FC required for IFRs. Light fixtures are protected with baffles and are installed in a manner to not obstruct the shooter's view down range. However, lockers have been installed downrange and blocks lighting between lanes. Down range lighting begins at thirteen feet from the firing line, however, the lights were not functioning at the time of the IHSAV. The downrange lighting ends approximately eight feet from the target line. Emergency lights are provided behind the firing line and are in working condition. An exit light is installed above the door. No electrical hazards were observed during the IHSAV.

IHSAV Posted to NGB FOIA Reading Room May, 2018 Page 7 of 14

NES Job Number: 013.1111449.13 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1527 of 1990

4.1.3 Bullet Traps

Bullet traps appear to be of commercial design and are permanently installed. The thickness of the bullet trap is sufficient to slow the maximum caliber of ammunition authorized to be fired at the range. The bottom plate of the bullet trap inclines upwards at approximately 45°, the upper plate of the bullet trap declines downwards at approximately 45°. The bullet trap is designed in a manner to prevent ricochets. The steel plates of the bullet traps were not bowed, punctured or severely pitted. The plates in the bullet trap were flush with other plates. The seams between the plates were protected with a cover which protruded above the surface of the plates.

4.1.4 Targets and Target Carriers

The electronic target retrieval system was not operating at the time of the IHSAV. The retrieval system is constructed in a manner as to minimize flat surfaces exposed to the firing line. It is unknown as to what types of targets are used in the Livingston IFR as the range is not actively used.

4.1.5 Range Use

The IFR is currently used as a locker room and as storage space. Excess office equipment, furniture, and kitchen supplies (cups and trays) were observed in the range behind the shooters' area and at the plenum wall. Lockers have been installed in the firing lanes. It is unknown if additional clothing and equipment are brought into the range. The area in front of the plenum wall was being used as a storage area at the IHSAV. It is unknown if pellets, BBs, magnum and armor piercing rounds are permitted in the range. Safety signage indicates "soft point ammo" is permitted. The ventilation system was not functioning at the time of the IHSAV. It is unknown if individuals other than maintenance and inspection personnel are allowed to walk downrange. This facility has an ABC-type hand-held fire extinguisher mounted on the wall next to the IFR door.

4.1.6 Range Maintenance

Brooms were not located within the range. Dry sweeping is performed approximately every two weeks. SFC Simanton was advised not to dry sweep the range as the range had been identified in the 2012 IHSAV as having excessive concentrations of lead. A range custodian (range control officer) has been not been appointed for the range.

IHSAV Livingston Indoor Firing Range Posted to NGB FOIA Reading Room May, 2018 Page 8 of 14

NES, Inc. NES Job Number: 013.1H1449.13

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1528 of 1990

4.1.7 Personal Protective Equipment (PPE)

It is unknown if individuals utilizing the range are required to wear approved eye and hearing protection as the range is not actively used for firing of weapons.

4.1.8 Posting of Signs

The Livingston IFR has a sign posted which indicates the following is permitted, "rifles or pistols using soft point ammo velocities and energies under 2200 ft/sec and 2200 ft/lbs respectively." There is no additional safety signage posted at this facility.

The firing lanes are numbered downrange on the target carriers, not at the bullet trap. See the photo log for a photo of the firing lane's view down range. The Livingston IFR does not have an illuminated warning sign which is interlocked with the range ventilation switch to alert individuals that the range is in use. This facility does not have a warning sign posted outside of the access door to the bullet trap to warn personnel not to enter.

4.1.9 Range SOP

The Livingston IFR is inactive and is not used as a firing range. This facility does not have a current site specific SOP for the range. A copy of the Army's general SOP for ranges was available. A range custodian was last identified in a 2003 range SOP.

4.1.10 Record Keeping

The Livingston IFR is not actively used as a firing range. A visitors log is not maintained for the IFR. Copies of previous inspections for the IFR were not available. An OSHA compliance program was not available at the time of the IHSAV. Armory staff is not trained regarding lead hazards present in the IFR. The Livingston IFR does not have a designated range safety officer.

4.2 Ventilation Inspection

The ventilation system for the range was not operational at the time of the IHSAV. Therefore, ventilation velocity measurements were unable to be performed. For informational purposes aspects of the ventilation were evaluated.

To prevent contamination of other ventilation systems, the exhaust for the range ventilation system is installed away from other air supply systems. The ventilation system is designed to introduce make-up air into the range from behind the shooters. However, this feature could not be tested. If the system was functional it appears that air would be exhausted at or behind the bullet trap. It is unknown if a HEPA filter with a reliable back-up filter is installed. The

ventilation system does not appear to recirculate air. It is unknown if the power system is designed so that the make-up and exhaust fans are electronically interlocked. It is not known if the exhaust fan will start first followed by the make-up fan.

4.3 Recommendations

The Livingston IFR was found to have several items that were not compliant with existing IFR standards. The IFR should be used as an active indoor firing range until each item of non-compliance has been sufficiently addressed. A complete list of items that must be addressed before the IFR can be utilized as an active IFR is provided in Appendix N, Recommendations.

NES Job Number: 013.001449.13 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1530 of 1990

5.0 SAMPLING RESULTS

5.1 Personal Breathing Zone Sampling

Personal breathing zone air sampling was not conducted during the ISHAV.

5.2 Ventilation

Air flow velocity measurements were not conducted as part of this IHSAV as the ventilation system was not functional.

5.3 Lead Wipe Sampling

A total of seven (7) lead wipe samples were collected at the Livingston IFR to be analyzed in accordance with NIOSH Method 7300, modified for Ghost WipesTM. The analytical results are summarized in the table below. Laboratory results are attached in Appendix J.

Analytical results for samples which exceed the acceptable concentration are shown in bold. Six of the seven samples were found to exceed the ARNG standard of $200\mu g/ft^2$. Results indicate that the range was not sufficiently cleaned prior to re-purposing the IFR as a locker room and the personnel occupying the space are likely to be exposed to lead.

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	Blank Corrected Results (µg/ft ²)	ARNG/HUD Standard (µg/ft ²)
081313- LVSTIFR-01	IFR	Food tray	330	328.5	≤ 40
081313-LVSTIFR -02	Locker #41	Floor, under locker	3600	3598.5	≤ 200
081313-LVSTIFR -03	Bullet trap	Floor, between lanes 2 and 3	98000	97998.5	≤ 200
081313-LVSTIFR -04	Locker #43	Top of locker	190	188.5	≤ 200
081313-LVSTIFR -05	Plenum wall	Wall, vertical	390	388.5	≤ 200
081313-LVSTIFR -06	Door to IFR	Floor	580	578.5	≤ 200
081313-LVSTIFR -07	Lane #4	Shooter's table	27000	26998.5	≤ 200

Bold = Denotes sample results were greater than the allowable level set by ARNG

5.4 Illumination

Illumination levels were measured throughout the IFR. Measurements were collected in footcandles (FC). In general, the measurements were taken at task surface level. Measurements not taken on a desk or workbench were taken at waist level. The illumination measurements were compared with IFR standards. In general, 100 FC is the minimum lighting requirements for the targets and 30 FC is required in all other areas of the IFR.

Lighting at the targets ranged 3.39 and 24.5 FC. The illumination at other locations within the IFR ranged from 3.39 to 24.5 FC. See Appendix E for a table of illumination measurements.

5.5 Indoor Air Quality

The average outdoor carbon dioxide concentration was measured to be 198 parts per million (ppm); therefore, the maximum indoor CO_2 concentration recommended by ASHRAE would be 900 ppm. The CO_2 concentrations from inside the IFR ranged between 219 to 266 ppm, within the acceptable limit.

ASHRAE recommends maintaining temperatures between 68 and 75°F and relative humidity between 30% and 60% relative humidity to minimize the growth of allergenic or pathogenic organisms. Temperatures inside the IFR ranged between 69.7 and 70.0 °F. Relative humidity ranged from 39.6 to 40.4%. The facility was within the recommended ranges for temperature and relative humidity. A table of the sample locations and corresponding IAQ measurements is available in Appendix E.

5.6 Other Observations

- Monthly inspection of the range fire extinguisher was out of date. The fire extinguisher was last inspected on October 10, 2012.
- Water damage was observed on six ceiling tiles (approximately ten square feet) in the southern portion of the range ceiling.

NES. Inc. NES Job Number: 013.IH1449.13 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1532 of 1990

6.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, *NES*^{*} professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. *NES* assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of *NES*, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since *NES* is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

Page 13 of 14

NES, Inc. NES Job Number: 013.1H1449.13 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1533 of 1990 7.0 PROJECT APPROVAL This IHSAV was reviewed and approved by: Non-Responsive Senior Industrial Hygienist Non-Responsive

October 24, 2013 Date

October 17, 2013 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **Non-Responsive** f the Southwest Regional Industrial Hygiene Office, 916-804-1707. Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

IHSAV Livingston Indoor Firing Range Posted to NGB/FOIA Reading Room May, 2018 Page 14 of 14 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.1H1449.13 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1534 of 1990

Appendix A

References

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process

AR 385-10, The Army Safety Program

Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

TB MED 503, The Army Industrial Hygiene Program

- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1535 of 1990

Appendix B

Assessment Criteria

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences. Occupational Exposure Limit

Posted to NGB FOIA Reading Room May, 2018 In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013

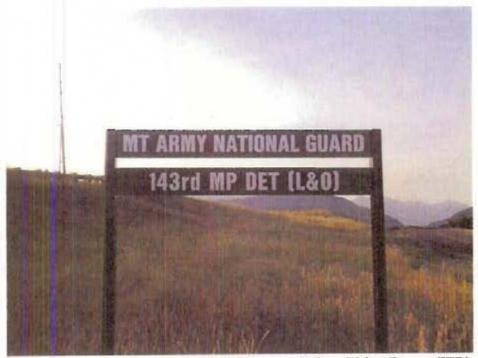


Photo 1: Facility signage for the Livingston Indoor Firing Range (IFR).



Photo 2: Entrance to IFR labeled "Locker Room".

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013

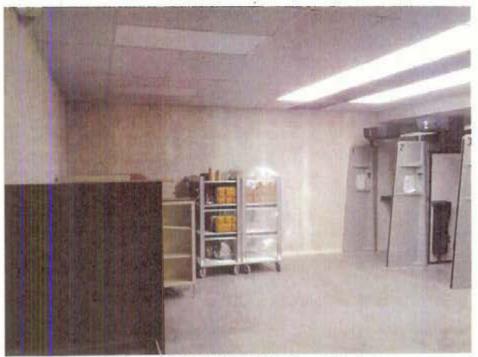


Photo 3: Area behind the firing line with storage.



Photo 4: Firing lanes 1-3, view downrange.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1539 of 1990

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013

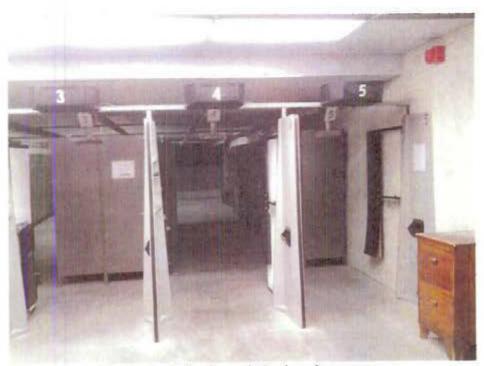


Photo 5: Firing lanes 3-5, view downrange.

A DECK			Man and	
	明	EVENT	19.00	
Mar Harnes	ON REA	ORD	HILL BE	
	DATE	BY	NO.	
	Set of	1A	1222	
etfecto PRM	JOST III	TAP -	100	1. K
OBJANED PRO	5392-	TAN	133	11
10 JOLIO PEM	R HAY12	PM		
SALGIO AM	14Ju 12	X		
SCOTIO HTM CHIMUNO HTM	SING/	TAN AND		
CADIC ID FEM	10-21-2	the		
BEANIL FIM	and the second second			
OIBPRIL PEN				1
Initial Ffm		1.0		
14 Junit 15 M		1.4		
RECHAR	ALTOC	ORD	- Million	
DATE HY	UATE	BY	- Andrew	

Photo 6: Fire extinguisher inspection tag, past due for monthly inspections.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013

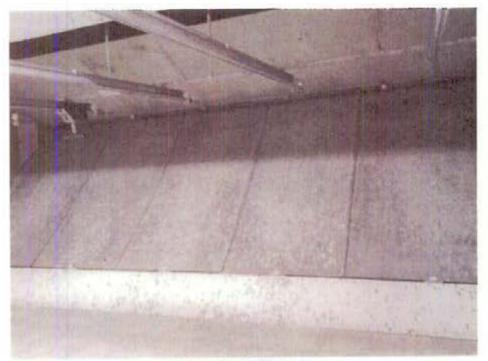


Photo 7: Bullet trap.

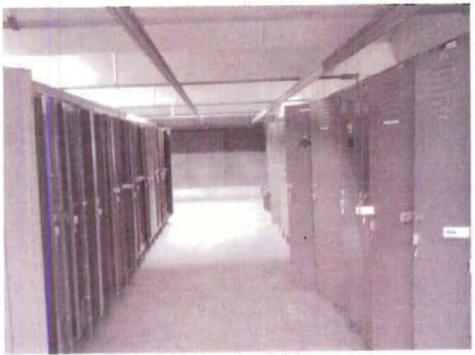


Photo 8: Lockers installed downrange.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013



Photo 9: Facility safety signage.

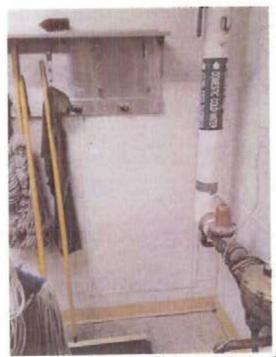


Photo 10: Door to the bullet trap area is blocked, and no safety signage posted.

×.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013



Photo 11: Water stained ceiling tiles.



Photo 12: Protective strip over bullet trap plates, extends beyond the height of the plates.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013



Photo 13: Electronic component of nonoperational target retrieval system.



Photo 14: Dust debris, evidence of dry sweeping in the IFR trash receptacle.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013



Photo 15: Lead wipe sample 81313-LVSTIFR-01 collected from a food tray stored behind the firing line.

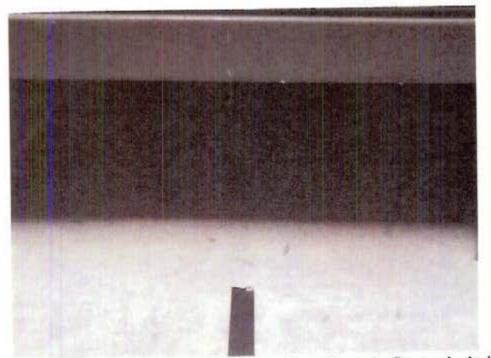


Photo 16: Lead wipe sample 81313-LVSTIFR-02 collected from the floor under locker #41.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013

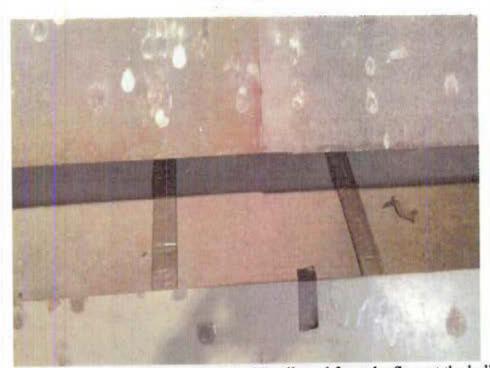


Photo 17: Lead wipe sample 81313-LVSTIFR-03 collected from the floor at the bullet trap, between lanes #2 and 3.

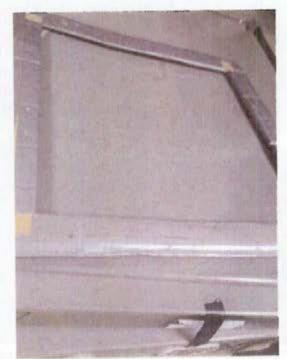


Photo 17: Lead wipe sample 81313-LVSTIFR-04 collected from the top of locker #43.

PHOTO LOG LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MONTANA AUGUST 13, 2013

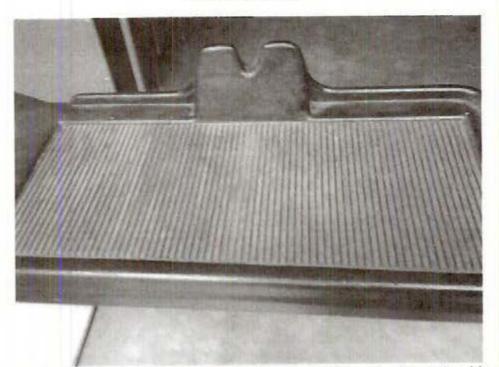
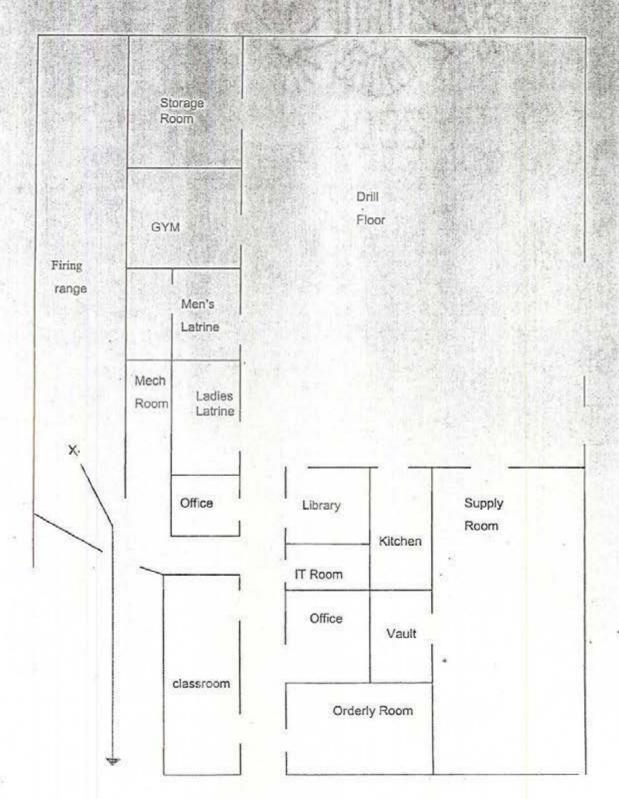


Photo 18: Lead wipe sample 81313-LVSTIFR-07 collected from the shooter's table at firing lane #4.

Livingston Armory Fire Evacuation Plan



<u>X</u> You are Here Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1548 of 1990

ILLUMINATION SURVEY

LIVINGSTON IFR LIVINGSTON, MONTANA AUGUST 13, 2013

Location	Light - FC	Minimum lighting requirements - FC
Target, Lane #1	6.39	≥ 100
Target, Lane #2	34.0	≥ 100
Target, Lane #3	7.11	≥ 100
Target, Lane #4	11.96	≥ 100
Target, Lane #5	31.1	≥ 100
Approximately 15 feet from bullet trap, west side	24.5	≥ 30
Approximately 15 feet from bullet trap, east side	19.7	≥ 30
Approximately 30 feet from bullet trap, west side	23.9	≥ 30
Approximately 30 feet from bullet trap, east side	3.39	≥ 30

FC = foot candle measurement Bold = Below Minimum Lighting Requirements

IAQ MEASUREMENTS

LIVINGSTON IFR LIVINGSTON, MONTANA AUGUST 13TH, 2013

Location	CO2 max permissible concentration 898 ppm	Temperature permissible range 65 – 80°F	RH% permissible range 30-60%
Outside	198	NA	NA
IFR Entrance	266 -	70.0	40.4
Center of Range	220	69.9	40.3
Adjacent to Bullet Trap	219	69.7	39.6

CO₂ = Carbon Dioxide ppm = Parts per Million °F = Degrees Fahrenheit RH = Relative Humidity CO = Carbon Monoxide STEL = Short Term Exposure Limit N/A = Not Applicable Bold = Outside of Permissible Range

5/13/13 013. TH14419.13 JFR page 1052 Livingston Photo # Signage for facility A2 View downrange Lanes 1.3 #3 View down rongo Lang #4 Entrance orker Koom #5 View with stored Hema #60 # ire in spection ast inspected tag . date out How of lockers between. #7 405 anes Bullet Trap #5 lockers between 20 # 9 Lanes 1+2 Sighage #10 adatis trap access #11 from storage room on exterior of building #12 txhaust fans Heated #13 (abole shooter position air saurce - ceiling - about #14 (behind sharter position plenum #15 1)act rear plenum wall p damaged ceiling tiles ¥16 Water be hind shoter's #17 Blow Centered View of Seam of bullet trap HR Angled view of seam of bullet trap #19 Target retrival panel at shooter position with instructions #20 Vantage II Gus heating system radiant tube heate IR above shooter, with open junction box (top lest #2 Fire extinguisher for range not located in recossed cabinet. dry sweeping debris in range gar bage Vossible #22 Cavi

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1551 of 1990

BEST	AVAIL	ABLE	COPY
------	-------	------	------

2082 #23 Lead whe sample # 8313-LVSTIFR-01 Ford tray stored #41 al in range botom 11 11 #2 -02 ž 2 + bets 61. 11 rap. 11 #3 203 under 11 11 #4 locker top o - 04 43 11 11 #5 Plenum .05 sal #G -06 at Patreno #7 Shooter's table 1 ane #4 -07 .

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1552 of 1990

Page 1 of 2

Wipe Sampling Summary Form

NES Job # 013. I# 1449.13
Collected By Non-Responsive
Sample # CERI313 - LVSTIFE-01
Analyte lead
Sample Collected From Food tray stored in range
y U
Wipe Area 1 Ft ² units us/ft ² Date 95/13/13 Time
Sample # - 81313 - 1 VST TEP-02
Analyte Lead
Sample Collected From Floor under locker # 411
between lanes 2+3
Wipe Area 1 5g ft units eig/ft Date 8/13/13 Time
Sample # \$1313 - LUSTIFR-03
Analyte Lead
Sample Collected From Bullet trap between lanes 2+3
Wipe Area $1 \in \mathbb{A}^2$ units $\frac{1}{10} \in \mathbb{A}^2$ Date $\frac{1}{10} \times \frac{1}{10} = \frac{1}{10}$
Sample # 81313-LUSTIFR-04
Analyte Lead
Sample Collected From Top of lock # 43 between
lanes 203
<u>Wipe Area</u> 1 F^2 units $\frac{\mu_5}{\Gamma^2}$ Date $\frac{46}{13}$ <u>Time</u>
Sample #
Analyte Lead
Sample Collected From Plenum unli
<u>Wipe Area</u> $15t^2$ units ug/st^2 <u>Date</u> $48/13/13$ <u>Time</u>
Network Environmental Systems, Inc.
1141 Sibley Street Folsom, California 95630
Ap. 49-11/11/11/11/11/11/11/11/11/11/11/11/11/

BEST AVAILABLE COPY

Page 2 of 2

Wipe	Samp	ling	Summary	Form	
------	------	------	---------	------	--

NES Job #_______ Collected By Non-Responsi

	- LUST II	R-Cla	
Analyte Lead			1
Sample Collected	From Cleo	er at entrai	ice door
Wipe Area	^z units <u>un</u>	1942 Date 3/173	s/13_Time
Sample # 41313	LUSTIF	R-07	
Analyte Lead			1
Sample Collected	From Sha	sters table	Lane #4
Wipe Area 15F	2_ units <u>a</u>	/42 Date 3/13	<u>liz Time</u>
Sample # 4131	3-LUSTIA	=e-Blank	
Analyte Lead			
	From 1 h		
Sample Collected	FIUI NIT	and and a second	
<u>Sample Collected</u> Wipe Area <u>NA</u>			Jrs_Time
			Jrs_ <u>Time</u>
Wipe Area <u>NA</u> Sample #			Jrs <u>Time</u>
Wipe Area NA	units <u>46</u> /		Jr <u>5</u> Time
Sample #	units	Saupt <mark>Date 3/13</mark>	
Wipe Area NA Sample #	units	Saupt <mark>Date 3/13</mark>	
Wipe Area NA Sample # Analyte Sample Collected	units	Saupt <mark>Date 3/13</mark>	

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, California 95630

units

Date

Wipe Area

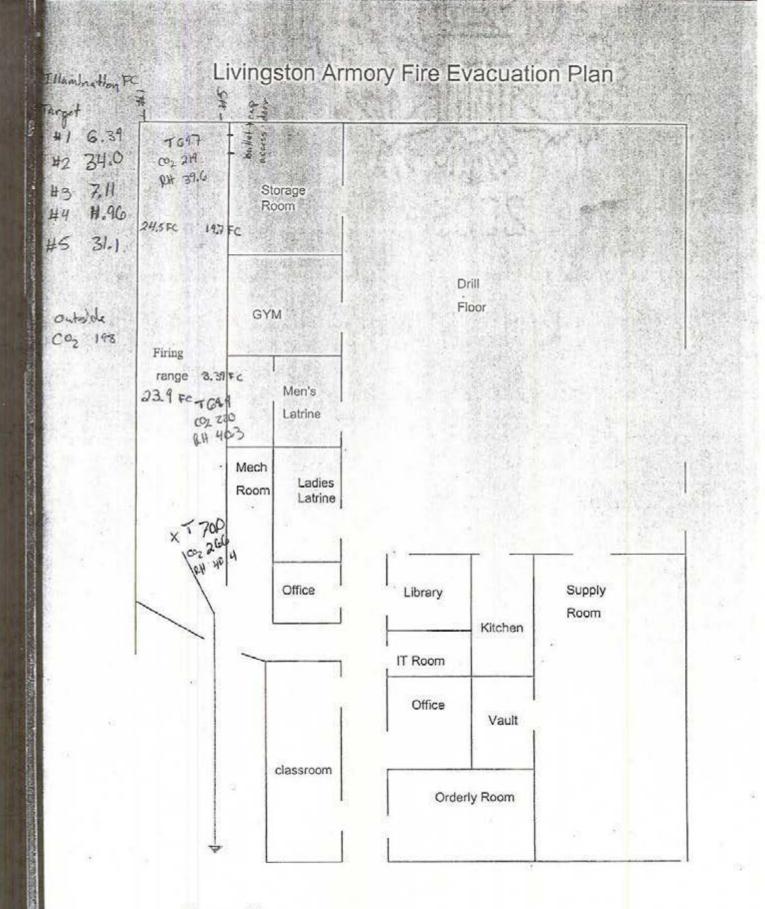
BEST AVAILABLE COPY

Time

Army National Guard IAQ Checklist

General Info – Name and address of facility with Zip code, POC's name, phone #, Military organization.	Livingston JFR
Shan Lovent clearly denicting location	1ks see map
Mechanical Room: check for dampness, bird/mice droppings, general cleanliness, make-up airflow, chemical/disinfectant storage, etc., spills, leaks (oil, steam), Operating schedule (up and down times), Humidification and what kind.	Kes see map Water damaged ceiling tiles ~ 10542 (G+iles)
HVAC system: checkdrip pan (dampness, mold, etc.), filters, coils, dampers (bird screens)	NA
Outside building: checkprevailing winds, outside air vents for HVAC, traffic near vents	NA
Inside building: Tcheck—Temp (69-79 F), RH (30-60%), CO2 (700ppm+ outside reading) should not exceed this, CO (0- 2ppm), Outside Airflow (20cfm/person)	see map
Additional Inside building info: check— partitions blocking airflow, ceiling tile (dampness, stains, breaking down), diffusers (open, blocked, diverted), smells (mold, perfume, chemical, etc.), new furniture, additions, carpet, carpet cleaning, new cleaning products (general housekeeping practices), to hot, cold, dry, moist.	Damages celling tiles
Ventilation – survey of all general and local ventilation systems	Not an Functional
Overall condition of HVAC system and maintenance plan.	Unknown
Obtained CO2, Temp, RH monitoring	See map
Provide Photographs of exterior / interior of each facility, each ventilation system any other areas or conditions pertinent to the survey	Yes

Check building occupancy: How many military personnel, how many civilian personnel	45 authoritad for armong
Any civilian activities in facility (cub scouts, classes, day care, parties etc)	No
Conduct a safety walkthrough of entire facility document any safety deficiencies found. IFA	Yes
Sampling – (Air) shall be conducted to ensure employees are not being exposed to any occupational health hazards – (Bulk) whenever applicable, e.g., paint chips, carpet, paneling – (Wipe) whenever applicable, e.g., floors (break room, general work), Scotch Tape samples for molds	NA
Submit final written report within 30 days after receipt of sample results. Which includes: 4 <u>comb bound</u> final reports with attachments, CD of each facility surveyed, POC, phone # and facility address included in Introduction portion.	
Appendices – should include: <u>Shop layout</u> with locations of measurements of local and general exhaust fan; sampling & ventilation data and this <u>Checklist</u>	



X You are Here Posted to NGB FOIA Reading Room May, 2018

JAO & TILLFOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1557 of 1990



Certificate of Calibration

7323038 Certificate Page 1 of 2

In the ment blentthe stray

PO Number

Company |D: 607229 INDUSTRIAL HYGIENE SW

10510 SUPERFORTRESS AVE SUITE C MATHER, CA 95655

Instrument ID: 90480719 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 90480719

a configure lot mion

Technician: Non-

Cal Date 02May2013 Cal Due Date: 02May2014 Interval: 12 MONTHS Temperature: 23.0 C Humidity: 47.0 %

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: LEFT AS FOUND Procedure: 33K4-4-564-1 ILLUMINANCE LIGHT METER

Remarks:

May, 2018

Tektronix certifies the performance of the above instrument has been verified using test equipment of known accuracy, which is traceable to National Metrology Institutes (NIST, NPL, PTB) that are linked to the International System of Units (SI). The policies and procedures used comply with ANSI/NCSL Z540.1-1994 (R2002).

This certificate shall not be reproduced, except in full, without the written permission of Tektronix.

Approved By: Service Represe

6 alebra (nan Stambe 11

NIST Traceable#	Inst. ID#	Description	Manufacturer	Model	Cal Date	Date Due
1700294966	17-1001075	6 STEEL RULE	STARETT	C416R-72	22Mar2013	22Mar2015
1700282698	17-1001081	LUMINANCE STD	OPTRONIC LABS	OL 455-4	31Jul2012	3130/2013
1700293531	17-2007/77	1000W LIGHT BULB	GOOCH HOUSEGO	OL FEL-P-K	30Jan2013	30Jan2014
1700285565	4083RC	MULTIMETER	FLUKE	8842A	05Aug2032	26Aug2013

6120 Hanging Moss Road • Orlando, FL 32807 • Phone: 800-438-8165 • Fax: 407-678-4854 Posted to NGB FOIA Reading Room BEST AVAILABLE COPY FOIA Reading Room

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1558 of 1990



MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 (530) 268-1860

Certificate of Calibration

Date: Nov 20, 2012

Cert No. 2008120221718

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

MPC Control #:	CD3925
Asset ID:	1307
Gage Type:	IAQ METER
Manufacturer:	TSI
Model Number:	7545
Size:	N/A
Temp/RH:	68.9°F / 35.6 9

Calibration Notes:

Work Order #: Purchase Order #: Serial Number. Department: Performed By: Received Condition: IN TOLERANCE Returned Condition: Cal. Date: Cal. Interval: Cal. Due Date:

013.IH1374.00 T75450846008 N/A

SAC-7004499

IN TOLERANCE November 19, 2012 12 MONTHS November 19, 2013

Standards Used to Calibrate Equipment

I.D.	Description.	Model	Serial	Manufacturer	Cal. Due Date	Traceability #	
CC8185	MULTIFUNCTION PROCESS	726	1355148	FLUKE	Nov 5, 2013	2008120211043	
J2270	LASER PARTICLE COUNTER	200L-1-115-1	90058761A	MET ONE	Apr 30, 2013	2008120175502	
Procedures	used in this Event		2 - 1	1.1	m-	134 - 14	

Procedure Name PARTICLE COUNTER 35519-045 VWR TEMP-HUM Description PARTICLE COUNTERS INSTRUCTIONS

Calibrating Technician:







The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the overage lactor k=2, which for normal distribution corresponds to a coverage probability of approximately 80%. The standard uncertainty of measurement has been determined in accordance with EA's Publication and NIST Technical Note 1297, 1994 Edition, Services randoms comply with ISO 17025.2005, ISO 9001.2008, ANSI/NCSL 2540-1, MPC Outling Measurement, NPC CSD and with customer purchase order instructions. ution corresponds to a coverage

Calibration cycles and resulting due dates were submitted/approved by the customer. Any number of factors may cause an instrument to drift out of tolerance before the rest scheduled calibration. Recalibration cycles should be based on frequency of use, environmental conditions and compare's entablianed systematic accuracy. The information on this mount, pertains only to the instrument Manifiad.

All standards are inspendie to SI Brough the National Institute of Standards and Technology (NIST) and/or recognized national or International standards isborntories. Services rendered include proper manufacturer's service instruction and are warmined for no loss than thirty (30) days. This report may not be reproduced in part or in a whole without the prior written approval of the issuing MPC las.

Page 1 of 1

(CERT, Rev 3)

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1559 of 1990



RMA Number: 800235189

Ship-to party 5180406

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

5180406 Sold-to party IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

Service Information: Purchase Order Purchase Order Date

CC-03/2

Description Calibration of VelociCalc Plus 8386A

57602 VELOCICALC Plus Air Velocity Meter Equipment Serial Number 54110581 8386A Material

Service Description:

Return Reason: CALIBRATION OVERDUE

Findings:

Unit sent in for clean and calibration. The unit passed as found.

Action:

The unit was cleaned, calibrated, and a complete operational checkout

was performed.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1560 of 1990

4222A CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com ENVIRONMENT CONDITION 8386A MODEL. "F ("C) 08.4 (20.2) TEMPERATURE. RELATIVE HUMDITY 36 %R11 54110581 SERIAL NUMBER inHg (hPa) 28.61 (968.8) BAROMETRIC PRESSURE MIN TOLERANCE AS LEFT OUT OF TOLERANCE As FOUND VERIFICATION RESULTS-- CALIBRATION Unit: filmin (m/s) SYSTEM V-106 VELOCITY VERIFICATION ALLOWABLE RANGE MEASURED STANDARD STANDARD MEASURED ALLOWABLE RANGE H 640 (3.25) 623-662 (3 17-3.36) 643 (3.26) -3-3(-0.02-0.02) 7 0(0.00) 0 (0.00) 965-1025 (4.90-5 21) 995 (5.06) 991 (5.03) 31-37 (0.16-0.19) 8 35 (0.18) 34 (0.17) 1423-1512 (7.23-7.68) (468 (7.45) 1476 (7.50) 61-67 (0.31-0.34) 9 64 (0.32) 64 (0.32) 2406-2555 (12.22-12.98) 96-102 (0.49-0.52) 10 2481 (12.60) 2463 (12.51) 99 (0.50) 4 99 (0.50) 4366-4636 (22 18-23.55) 4440 (22.55) 155-164 (0.79-0.84) 11 4501 (22.87) 159 (0.81) 160 (0.81) 3 7760-8240 (39.42-41.86) 7943 (40.35) 8000 (40.64) 318-338 (162-172) 12 325 (1.65) 6 328 (1.67) Unit: °F (°C) SYSTEM T-119 TEMPERATURE VERIFICATION ALLOWABLE RANGE MEASURED STANDARD ALLOWABLE RANGE # STANDARD. MEASURED 139.8 (59.9) 139.5-140.5 (59.7-60.3) 31.5-32.5 (-0.3-0.3 2 140.0 (60.0) 32.0 (0.0) 32.1 (0.1) Unit: inH ,O (Pa) SYSTEM V-106 PRESSURE VERIFICATION # STANDARD ALLOWABLE RANGE MEASURED ALLOWABLE RANGE MEASURED STANDARD -4 119--4 027 -4.084 7.942-8.112 (1977.5-2020.0) -4.0738.074 (2010.4) 3 8.027 (1998.7) (~1016.9) (-1025.6--1002.8) (-1014.2) 13.906-14.198 14.052 14.114 2.007-2.057 (499.7-512.3) 2.041 (508.2) (3462.7-3535.2) 2.032 (506.0) (3514.4) (3498.9)

HUMIDITY AS FOUND			TWO STORES STORES	Unit: %RH			
#1	STANDARD	MEASURED	ALLOWABLE RANGE	14	STANDARD	MEASURED	ALLOWABLE RANGE
-		11.8	7.0-13.0	4	70.0	69.1	67.0-73.0
2	30.0	30.6	27.0-33.0	5	90.0	89.4	87.0~93.0
2	50.0	49.9	47.0~53.0		11 C		

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found date) and has been calibrated using standards whose accuracies are inseeable in the United States National Institute of Standards and date) and has been calibrated using standards whose accuracies are inseeable in the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy to traceable to MIST, or is derived from accepted values of provide constants. TSUs calibration system is registered to ISO-9001:2008 and meets the requirements of ISO 10012:2003.

Measurement Variable DC Voltage Pressure Velocity Temperature Humidity	System ID E004477 E001558 E003327 E001800 E003539	Last Cal. 12-15-11 12-12-11 09-19-07 01-19-12 02-28-12	Cal. Due 12-15-12 06-12-12 09-19-12 07-19-12 08-28-12	Meosurement Variable Temperature Pressure Barometric Pressure Temperature	System 1D 15001644 15001560 15001592 15001799	Last Cal. 01-20-12 12-12-11 04-08-11 01-19-12	Cal. Due 07-20-12 06-12-12 04-08-12 07-19-12
---	--	---	--	---	---	---	--

Non-Responsive

March 27, 2012

DATE

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

OC 12 CONT_DEP-LA

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1561 of 1990

2300

Í	9.	CER	TSI Inc.	orporated. 50	00 Car	digan	Road, Sho	review	N AND MN 55126 U 24 http://www	TESTING SA .tsi.com
EN	VIRONMENT CU	INDITION				M	DEL	17-17	1155 - X - X	8386A
TEN	PERATURE		69.1 (20.6)	°F (°C)		MC	IDEI.			USUUA
Rei	ATIVE HUMIDIT	v	. 37	%RH		-				E4440504
	COMETRIC PRESS		28.61 (968.8)	inHe (hPa)	-	SEF	GAL NUMI	BER		54110581
	As LEFT	- C A I.	IBRATI			OF T	OLERANCI.	N I	LESUL T	s -
Te	and a second state s	ERIFICATION			S	ASU	M T-119			Unit: °F (°C
#	STANDARD	MEASURED	ALLOWAR	ILE RANGE	#	-	ANDARD	ME	ASURED	ALLOWABLE RANGE
1	32.0 (0.0)	32.1 (0.1)		(-0.3-0.3)	2	14	0.0 (60.0)	139	8 (59.9)	139.5~140 5 (59.7~60.3)
Pu	ESSURE VERI	FICATION			S	VSTR	M V-106			Unit: inH ₂ O (Po
#	STANDARD	MEASURED	ALLO	WABLE RANG		W	STANDAR	D	MEASURED	ALLOWABLE RANCE
1	-4,073	-4.084 (-1016.9)		1194.027)	3	8,027 (1998	8.7) 8	.074 (2010.4)	7,942~8.112 (1977.5~2020.)
2	2.032 (306.0)	2.041 (508.2)	2.007-2.0	057 (499.7-3)	12.3)	4	14,052 (3498.9)		14.114 (3514.4)	13.906~14.198 (3462.7-3535.2)
	MIDITY VERI	DESTION			S	YSTI	M H-102			Unit: %R
#	STANDARD	MEASURED	ALLOW	ABLE RANGE		#	STANDARU		MEASURED	ALLOWABLE RANGE
1	10.0	111.8		.0-13.0		4	70.0		69.1	67.0-73.0
2	30.0	30.6	21	7.0-33.0		5	90.0		89.4	87.0-93.0
3	50.0	49.9	4	7.0-530	1					
	Lines Views	PLAT TIAN			5	SYSTI	EM V-110			Unit: ft/min (m/
	ELOCITY VERI		ALLOWAR	FRANCE	1 #		ANDARD	ME	ASURED	ALLOWABLE RANGE
#	STANDARD	MEASURED	-3-3(-0.)		7	-	18 (3.29)	64	6 (3.28)	629-667 (3.19-3.39)
1	0 (0.00)	0 (0.00)	32~38 (0.	and the second se	8		96 (5.06)	-	7 (5.06)	966~1025 (4.91~5 21)
2	35 (0.18)	64 (0.32)	61-67 (0.	and the second se	9		76 (7.50)	14	16 (7.50)	1432-1521 (7.27-7.72)
3	64 (0.33)	99 (0.50)	95-102 (0	the second s	10	-	76 (12.58)	247	2 (12.56)	2401~2550 (12.20~12.95)
4	99 (0.50)	159 (0.81)	155-165 (0		B		98 (22.85)		8 (23.10)	4363-4633 (22.17-23.54)
5	160 (0.81)	346(1.76)	335-356 (1	And a second sec	12	-	88 (40.58)	801	3 (40.71)	7748~8227 (39.36~41.80)

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and hus been calibrated using standards whose accuracies are traceable to the United States National Institute of Sumkards and rechnology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable to MIST or is derived from accepted values of physical constants. TSI 's calibration system is registered to ISO-9001 (2008 and access the requirements of ISO 10012(2003).

Measurement Variable	System ID E001800	Last Cal. 01-19-12	Cal. Due 07-19-12
Temperature DC Voltage	E004477	12-15-11	12-15-12
Pressure	E001558	12-12-11	06-12-12
Velocity	£003327	09-19-07	09-19-12
Humidity	E003539	02-28-12	08-28-12
Temperature	E004402	12-08-11	06-08-12
Pressure	E001721	12-13-11	06-13-12
Velocity	E003327	69-19-07	09-19-12

Measurement Variable	System 1D	Last Cal.	Cal. Due
Temperature	E001799	01-19-12	07-19-12
Temperature	1:001644	01-20-12	07-20-12
Pressure	E001560	12-12-11	06-12-12
Barometric Pressure	E001992	04-08-11	04-08-12
DC' Voltage	E001658	06-28-11	12-28-12
Pressure	E001719	12-13-11	06-13-12
Batometric Pressure	E001992	04-08-11	04-08-12

sbo

March 27, 2012 DATE.

or to description of

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1562 of 1990

TABLE 1 LEAD WIPE SAMPLE RESULTS LIVINGSTON INDOOR FIRING RANGE LIVINGSTON, MT AUGUST 13, 2013

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	Blank Corrected Results (µg/ft ²)	ARNG/HUD Standard (µg/ft ²)
081313- LVST1FR-01	IFR	Food tray	330	328.5	≤ 40
081313- LVSTIFR -02	Locker #41	Floor, under locker	3600	3598.5	≤ 200
081313- LVSTIFR -03	Bullet trap	Floor, between lanes 2 and 3	98000	97998.5	≤ 200
081313- LVSTIFR -04	Locker #43	Top of locker	190	188.5	≤ 200
081313- LVSTIFR -05	Plenum wall	Wall, vertical	390	388.5	≤ 200
081313- LVSTIFR -06	Door to IFR	Floor	580	578.5	≤ 200
081313- LVSTIFR -07	Lane #4	Shooter's table	27000	26998.5	≤ 200

 $\label{eq:main_state} \begin{array}{l} \mu g/ft^2 = \mbox{micrograms per square foot} \\ ARNG = \mbox{Army National Guard} \end{array}$

HUD = US Department of Housing and Urban Development

Bold = Above ARNG Standard limit



ANALYTICAL REPORT

Report Date: August 26, 2013

Non-Responsive

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630

Phone: (916)	353-2370 x 20
Fax: (916)	353-2375

Non-Responsive

Workorder: 34-1323130 Client Project ID: 013.IH14219.13/Livingston IFR Purchase Order: 013.IH14219.13 Project Manager: Non-Responsive

Analytical Results

Lead	330	330	6.3		
Analyte	ug/sample	ug/ft²	RL (ug/sample)	A Children I I Port	
Method: NIOSH 7300 Mod.	Samplin	Sampling Parameter: Area 1 ft ^a			
Lab ID: 1323130001	Sampling Locat	Received: 08/19/2013			
Sample ID: 81313-LVSTIFR-01	Media: Ghost Wipe			Collected: 08/13/2013	

Sample ID: 81313-LVSTIFR-02	Med	Collected: 08/13/2013		
Lab ID: 1323130002	Received: 08/19/2013			
Method: NIOSH 7300 Mod.	Sampling	Prepared: 08/20/2013 Analyzed: 08/22/2013		
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	
Lead	3600	3600	2.5	

Lead	98000	98000	63			
Analyte	ug/sample	ug/ft*	RL (ug/sample)			
Method: NIOSH 7300 Mod.	Samplin	es 1 ft²	Prepared: 08/20/2013 Analyzed: 08/22/2013			
Lab ID: 1323130003	Sampling Locat	Sampling Location: Livingston IFR				
Sample ID: 81313-LVSTIFR-03	Me	Collected: 08/13/2013				

Lead	190	190	6.3	and the second	
Analyte	ug/sample	ug/ft*	RL (ug/sample)		
Method: NIOSH 7300 Mod.	Samplin	Sampling Parameter: Area 1 ft ²			
Lab ID: 1323130004	Sampling Locat	Received: 08/19/2013			
Sample ID: 81313-LVSTIFR-04	Me	Collected: 08/13/2013			

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, 84123 USA . PHONE +1 801 266 7700 FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Group. An ALS Limited Company

www.alsglobal.com

PROFIT SCHLIMONS PRIME FARTHER

Posted to NGB FOIA Reading Room Page 1 of 4 May, 2018 BEST AVAILABLE COPY Mon, 08/26/13 4:41 PM FOIA Requested Record #J-15-0085 (MD Released by National Guard Bureau Page 1564 of 1990



Workorder: 34-1323130 Client Project ID: 013.IH14219.13/Livingston IFR Purchase Order: 013.IH14219.13 Project Manager: Non-Responsive

Analytical Results

Lead	390	390	6.3	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Sampling	Prepared: 08/20/2013 Analyzed: 08/22/2013		
Lab ID: 1323130005	Sampling Locati	Received: 08/19/2013		
Sample ID: 81313-LVSTIFR-05	Med	Collected: 08/13/2013		

Lead	580	580	6.3	
Analyte	ug/sample	ug/ft*	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Sampling	g Parameter: Are	ea 1 ft²	Prepared: 08/20/2013 Analyzed: 08/22/2013
Lab ID: 1323130006	Sampling Locati	ion: Livingston I	FR	Received: 08/19/2013
Sample ID: 81313-LVSTIFR-06	Med	dia: Ghost Wipe		Collected: 08/13/2013

Lead	27000	27000	25	
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Samplin	g Parameter: Are	ea 1 ft²	Prepared: 08/20/2013 Analyzed: 08/22/2013
Lab ID: 1323130007	Sampling Locat	ion: Livingston I	FR	Received: 08/19/2013
Sample ID: 81313-LVSTIFR-07	Mee	dia: Ghost Wipe	1	Collected: 08/13/2013

Sample ID: 81313-LVSTIFR-Blank	Me	dia: Ghost Wipe	1	Collected: 08/13/2013
Lab ID: 1323130008	Sampling Locat	ion: Livingston I	FR	Received: 08/19/2013
Method: NIOSH 7300 Mod.	Samplin	g Parameter: Are	aa Not Applicable	Prepared: 08/20/2013 Analyzed: 08/22/2013
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	
Lead	1.5	NA	1.3	

Comments

Sample: 1323130001

Lead was reported from 5X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130002

Lead was reported from 2X dilution data for this sample in order to obtain a response within the linear range for lead. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130003

Lead was reported from 50X dilution data for this sample in order to obtain a response within the linear range for lead. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130004

Lead was reported from 5X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution level.



Workorder: 34-1323130 Client Project ID: 013.IH14219.13/Livingston IFR Purchase Order: 013.IH14219.13 Project Manager: Non-Responsive

Analytical Results

Lead	390	390	6.3	
Analyte	.ug/sample	ug/ft²	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Samplin	g Parameter: Are	ea 1 ft²	Prepared: 08/20/2013 Analyzed: 08/22/2013
Lab ID: 1323130005	Sampling Locat	Sampling Location: Livingston IFR		
Sample ID: 81313-LVSTIFR-05	Me	Collected; 08/13/2013 Received: 08/19/2013		

Lead	580	580	6.3	and the second second second second
Analyte	ug/sample	ug/ft*	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Samplin	g Parameter: An	ea 1 ft*	Prepared: 08/20/2013 Analyzed: 08/22/2013
Lab ID: 1323130006	Sampling Locat	ion: Livingston I	FR	Received: 08/19/201
Sample ID: 81313-LVSTIFR-06	Me	dia: Ghost Wipe	9	Collected: 08/13/2013

Sample ID: 81313-LVSTIFR-07	Me	dia: Ghost Wipe	•	Collected: 08/13/2013
Lab ID: 1323130007	Sampling Locat	tion: Livingston I	FR	Received: 08/19/2013
Method: NIOSH 7300 Mod.	Samplin	g Parameter: An	ea 1 ft²	Prepared: 08/20/2013 Analyzed: 08/22/2013
Analyte	ug/sample	ug/ft*	RL (ug/sample)	
Lead	27000	27000	25	

Sample ID: 81313-LVSTIFR-Bla	nk Me	dia: Ghost Wipe	,	Collected: 08/13/2013
Lab ID: 1323130008	Sampling Locat	ion: Livingston I	FR	Received: 08/19/2013
Method: NIOSH 7300 Mod.	Samplin	g Parameter: An	ea Not Applicable	Prepared: 08/20/2013 Analyzed: 08/22/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	1.5	NA	1.3	

Comments

Sample: 1323130001

Lead was reported from 5X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130002

Lead was reported from 2X dilution data for this sample in order to obtain a response within the linear range for lead. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130003

Lead was reported from 50X dilution data for this sample in order to obtain a response within the linear range for lead. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130004

Lead was reported from 5X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution lavel.



Workorder: 34-1323130

Client Project ID: 013.IH14219.13/Livingston IFR Purchase Order: 013.IH14219.13 Project Manager: Non-Responsive

Comments

Sample: 1323130005

Lead was reported from 5X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130006

Lead was reported from 5X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution level.

Sample: 1323130007

Lead was reported from 20X dilution data for this sample in order to obtain a response within the linear range for lead. The reporting limit was raised proportionately to the reported dilution level.

Report Authorization

Method	Analyst	Peer Review
NIOSH 7300 Mod.	Non-Responsive	Non-Responsive

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alsit.lab@ALSGlobal.com Web: www.alsslc.com



Workorder: 34-1323130

Client Project ID: 013.IH14219.13/Livingston IFR Purchase Order: 013.IH14219.13/Livingston IFR Project Manager: Non-Responsive

General Lab Comments

The results provided in this report relate only to the items tested. Samples were received in acceptable condition unless otherwise noted. Samples have not been blank corrected unless otherwise noted. This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP) Utah (NELAC) Nevada Oklahorna Iowa Florida (TNI) Texas (TNI)	ADE-1420 DATA1 UT00009 UT00009 IA# 376 E871067 T104704456-11-1	http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/lbs/dw/labservice.htm http://www.deq.state.ok.us/CSDnew/ http://www.lowadnr.gov/InsideDNR/RegulatoryWater.aspx http://www.lowadnr.gov/InsideDNR/RegulatoryWater.aspx http://www.dep.state.fl.us/labs/bars/sas/qa/ http://www.toeq.texas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Lead Testing: CPSC Soil, Dust, Paint ,Air	ACLASS (ISO 17025, CPSC) AIHA (ISO 17025, AIHA ELLAP and NLLAP)	ADE-1420 101574	http://www.aclasscorp.com http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

Address 1/41 Statey Stree Address 1/41 Statey Stree Folsom CA 95 63 Pers Non-Ress Teles Fax E-m Billin REQUEST FOR ANALYSES Laboratory Use Only Client Sample Numb \$13/3 < L VSTIF A M - C N M - C N M - C	ber Matrix* 52000 500	CONTACT	Quote No ALS Project Manage Sample Collection Sampling Site Industrial Process Date of Collection Date of Shipment Chain of Custody No. How did you first learn	DATE TO SENDING SAMPLES Non-Respon Vingston IFR 1 8/13/13 8/13/13	Units**
Company Name NES Address 1/41 Sibley Stre Folsom CA 95 623 Pers Non-Recs Fax E-m Billin REQUEST FOR ANALYSES Laboratory Use Only Client Sample Numb 8/13/3 = L VSTIF A // - C N // - C N // - C	ber Matrix* 62: 02: 02: 03: 04:	Sive	ALS Project Manag	vingston IFR 8/13/13 8/15/13 m about ALS?	Units**
Pers Teley Fax E-m Billin REQUEST FOR ANALYSES Laboratory Use Only Client Sample Numb Client Sample Num	ber Matrix* ER-01 Schwigt CQ: 03: 04:	Sample Volume	Industrial Process Date of Collection Time Collected Date of Shipment Chain of Custody No. 6. How did you first lean	() St/13/13 St/15/13 m about ALS?	- Los
Laboratory Use Only Client Sample Numb \$13j3 < L VSTTF	62. 03.				100
4 H - (W H - (W H - (W H - (021	1 \$ + 2	NIOSH	7300-Lead	-ug/\$7
* 11 ~ 1					+
11 // -1 - R	06	Y			Y
Specify: Solid sorbent tube, e.g. Charcoal; Filter 1. µg/sample 2. mg/m ³ 3. ppm 4. % 5. µg mments					
ssible Contamin Chain of Custo	sive		Date/Time 4/14	5/12	
linquished by linquished by linquished by / li			Date/Time	lialis 1920	

Posted to May, 2018 A Reading Room

FOIA Requested Re Released by National Guard Bureau Page 1569 of 1990

Unit Name: 143RD MILITARY POLICE DET

pons

Name

0

Rank

Non-Responsive

Non-Responsive

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1570 of 1990

CONTROL									
NUMBER	HAZARD DESCRIPTION	SITE	RAC	CORRECTIVE ACTIONS (Abatement Plan)	DATE	ACTION	Estimated Cost(s)	DATE	REFERENCES
MTLVIFR-081313- 4.1.2	lilum/nation is insufficient	IFR	4	Replace the burnt out bulbs, Increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.			2		NGR 385-15 2-2 c (1)(b);
MTLVIFR-081313- 4.1.5	Lockers and excess office and kitchen equipment is stored in the range	IFR	e	Remove lockers and stored items, until the IFR is officially converted. Cleaning of stored items is required, prior to removal to prevent migration of lead.			5		NGR 385-15 2-3 b
MTLVIFR-081313- 5.3	Recurring Observation: Lead concentrations exceed established concentration.	IFR	8	Crean the entire IFR and materials stored within using cleaning procedures outlined in NGR 385-15, 5-4. Improve housekeeping practices to help prevent migration of lead dust related to IFR and potentially partodic weapons cleaning episodes.	*				29 CFR 1910,1025 (h)(1) & General Duty Clause 5 (a)(1)
FR-081313- 4.1.6	MTLVIFR-081313- 4.1.6 the range every two weeks.	IFR	2	Bo not dry sweep the range. Use the housekeeping procedures outlined in NGR 385 15, 5-4 to perform cleaning. Utilize Armory Clean-Up SOP Included in this report.					NGR 385-15 2-4 e
FR-100912-	MTLVIFR-100912- Staff were not aware of lead 4.1.10 hazards in the IFR.	IFR	69	Ensure that staff or maintenance entering the IFR are aware of the associated hazards including lead.			-	Ŕ	29 CFR 1910 1200; 29 CFR 1910.1025
FR-100912- 4.4.1	MTLVIFR-100912- Fire extinguisher past due for 4.4.1 monthly (nspections	IFR	. 4	Perform and document monthly inspections of fire extinguishers as required.					29 CFR 1910.157 (e)(2)

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1571 of 1990

BEST AVAILABLE COPY

.

•	REFERENCES	General Duty Clause 5 (a)(1) & 29 CFR 1910.1025 (h)(1)	Prudent Industrial Hygiene Practice; ANSI Z4,1-1986
DARDS	DATE CORRECTED		
ALTH STAN	Estimated Cost(s)	÷.	
ETY AND HE	ACTION		
Ithwest Log E WITH SAFI ston MT	SUSPENSE DATE		
Industrial Hygiene Southwest Violation Inventory Log CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS LOG OF SCHEDULE OF CORRECTIVE ACTION - INVESTIGATION	CORRECTIVE ACTIONS (Abatement Plan)	Warning signs should be posted on facility entryway doors and the Converted IFR doors, in order to help protect personnel mainly children under 7 years of age and pregnant or nursing females	Determine the source of the water damage and if repairs are necessary. Perform repairs as needed with the knowledge of lead contamination in the ceiling tiles material.
ECTIV	RAC	e	en
OF CORR	SITE	Armory	H.
LOG OF SCHEDULE	HAZARD DESCRIPTION	ATLVIFR-100912. 5.c Executive Potential lead exposure Summary	Water damaged ceiling tiles
CUARD 20	CONTROL NUMBER CLOSED [X]	MTLVIFR-100912- 5.c Executive Summary	MTLVIFR-100912- 4.4.2

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #<mark>J</mark>-15-0085 (MT) Released by National Guard Bureau Page 1572 of 1990 Reference DA FORM 4754 VER: 15 OCT 2009

BEST AVAILABLE COPY

Page 2 of 2

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Livingston IFR. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Observations and Recommendations; Item 2 – Ventilation Inspection).

INDOOR FIRING RANGE RECOMMENDATIONS

The following recommendations must be addressed if, and only if, the IFR is to be used as an active firing range again. These recommendations must be addressed prior to using the range.

N4.1.1 Building Envelope – Replace the deteriorated weather stripping around the door to the IFR.

N4.1.2 Range Lighting – Replace the burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.

N4.1.3 Bullet Traps – Determine if the protective cover over plate seams of the bullet trap need reconfiguration.

N4.1.4 Target and Target Carriers – Have the target retrieval system serviced or repaired.

N4.1.5 Range Use – Do not use the range for any purpose except for firing. Cleaning of stored items is required, prior to removal to prevent migration of lead.

N4.1.6 Range Maintenance – Do not dry sweep the range. Use the housekeeping procedures outlined in NGR 385-15, 5-4 to perform cleaning. Utilize Armory Clean-up SOP included in this report. Appoint a range control officer. Ensure the range custodian is trained and is aware of their responsibilities.

N4.1.8 Posting of Signs – Post the required safety signs in or in the vicinity of the range. Install an illuminated warning sign interlocked with the range ventilation switch located outside of the firing range to alert individuals that the range is in use. Label each firing lane at the bullet trap. Post a sign at the bullet trap access door which warns personnel not to enter during range operation.

N4.1.9 Range SOP – Develop and implement a site specific range SOP.

N4.1.10 Record Keeping - Maintain copies of past inspections at the facility.

N4.2 Ventilation - Have the ventilation system serviced or repaired.

FACILITY RECOMMENDATIONS

N4.1.6 Range Maintenance – Strictly prohibit any and all dry sweeping within the IFR / locker room until the space has been sufficiently cleaned.

N4.1.8 Signage – Update the signage to accurately communicate current conditions. If the space is to be cleaned and re-purposed, signage communicating hazards associated with an IFR should be removed.

N4.1.10 Record Keeping - Ensure all staff within the facility have been properly and sufficiently educated on the existing lead hazards associated with the IFR / locker room.

N5.3 Lead Wipe Sampling – Clean the entire IFR and materials currently stored within using cleaning procedures outlined in NGR 385-15 5-4. Access to the IFR / locker room should be strictly prohibited to clean-up personnel until appropriate lead wipe samples have been collected and indicate the space is safe to enter.

N5.6 Other Observations –

- 1. Perform and document monthly inspections of fire extinguishers as required.
- Determine the source of the water damage and whether repairs are necessary. Perform repairs as needed.

FY 13 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	Q3	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no	953-01-04	NA	NA	NA	0
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04	NA	NA	NA	0
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05	NA	NA	NA	0
Number of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05	NA	NA	NA	0
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06	NA	NA	NA	0
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06	NA	NA	NA	0
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are	953-01-07	NA	NA	AA	0
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07	NA	NA	NA	0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled, that are recommended for control	953-01-08	NA	NA	NA	0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled	953-01-08	NA	NA	NA	0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09	NA	NA	NA	0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09	NA	NA	NA	0
Total number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	IHT	THI	IHT	IHT
Total number of DOEHRS-IH shops coded as Priority 1	953-02-10	IHT	IHT	THI	IHT
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	IHT	IHT	IHT	IHT
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	IHT	THI	IHT	IHT
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-12	IHT	IHT	IHT	IHT
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	THI	IHT	IHT	IHT
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	IHT	IHT	H	HIT -
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	Ħ	IHT	H	THI
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	Η	IHT	Ħ	IHT
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	IHT	THI	IHT	IHT

IFR Livingston Livingston, Montana

FY 13 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	Q3	Q4 Annual
Number of percentred who were reassessed by industrial hydrene within the last 12 months.	953-02-15	THI	IHT	THI	IHT
Number of personnel who required reassessment by industrial hygiene within the last 12 months	953-02-15	THI	IHT	HI	ΗT
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	THI	IHT	IHT	IHT
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	IHT	THI	ΗT	THI
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	IHT	THI	IHT	THI
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	IHT	Η	IHT	IHT
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18	NA	AA	NA	0
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18	AN	NA	NA	Ŧ
Number of ventilation systems which require corrective action based on deficiencies	953-02-19	NA	NA	NA	-
Number of ventilation systems which were evaluated by an IH	953-02-19	NA	NA	NA	
Number of design review packages evaluated and addressed by an IH with	953-02-20	IHT	IHT	IHT	IHI
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	IHT	IHT	HT	IHT

Posted to NGB FOIA Reading Room May, 2018

FACILITY INFORMATION

(Information listed in First Section) (1st Few Paragraphs/Pages of Report)

1. Date Prepared: 13 August 2013

2. Names (and Company Name) of Personnel Conducting Industrial Hygiene Site Assistance Visit: Non-Responsive

 Facility Name and Brief Summary of Primary Activities Conducted at Facility: Livingston Armory

4. Facility Address: 24 Fleshman Creek Road, Livingston, MT 59230

5. Primary Unit Assigned to Facility (Ensure to capture and provide Unit Identification Code (UIC)): 143rd MP Det. UIC: Mon-Responsive

6. Co-Tenant Units Assigned or Working Within Facility (LIST ALL): None

7. Square Ft. Area of Facility: Unknown

8. Work Schedule: Monday-Friday, 8 AM to 5 PM

9. Number of work bays: 0

10. Equipment Density and Type: N/A

a. List Equipment Nomenclature Serviced or Maintained at Facility:

b. List Total Number for Each Nomenclature Serviced or Maintained at Facility:

11. Total Number of Personnel: 45 Authorized

12. No. of Admin. Personnel (Include Status – AGR, Fed. Tech., IDT, State or Contract Employee): 2 AGR

13. No. of Maintenance Personnel (Include Status – AGR, Fed. Tech., IDT, State or Contract Employee): 0

14. Total Number of Personnel Enrolled in the Hearing Conservation Program: 0

15. Total Number of Personnel Enrolled in the Respiratory Protection Program: 0

16. Total Number of Personnel Enrolled in the Medical Surveillance Program: 0

17. Total Number of Personnel Enrolled in the Vision Program: 0

Facility Background Info Worksheet.doc

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

Page 1 of 2

- 18. Facility Commander: Non-Responsive
 - Email address, Commercial Telephone Number and Unit Assigned to: 143 MP Commander PH: (406) 324-5061

pons

19. Safety Officer: Non-Res

a. Email Address, Commercial Telephone Number and Unit Assigned to: Non-Responsive PH: (406) 324-5060

20. Facility Telephone Number: (406) 324-5060

Facility Background Info Worksheet.doc

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1578 of 1990

Page 2 of 2

INDOOR FIRING RANGE INSPECTION CHECKLIST

See paragraphs 1-23 through 1-25 of this regulation for inspection requirements. For the range to be considered safe each of the following statements shall be true and airsampling results shall be below the standard for Lead. The information in parentheses after each statement denotes the location of the requirement in this or other regulations.

Location of the Rangel and marketing, Marketing Date Along 13, 2013 CAPN HILS

Range Custodian Norman Independent - 1

Teleph

Suilly 1781

Part 1, Physical Safety Inspection

A. Building Envelope

- 1 Each firing lane is at least 4 feet wide. [1-17a(1)(a)] Yes 5 Kene 5 Yes
- Yes 2 Pipes, conduits, and other projecting surfaces are baffled or covered by a material that shall protect these items and prevent ricochets. [1 -17a(1)(b)]
- 9763 3. No windows or doors are located in front of the firing line. (Except access door to the back of the bullet trap) [1-17a(1)(d)] Actes door to the bullet trap [2-17a(1)(d)] by washe luck waters modely
- Yes 4 There are no open floor drains in the range [1 - 17a(2)(c)]
- Yes 5. There is no carpet, drapes or other fiber-like material in the range [1 -17a(2)(d)]
- Yes 8 Pipes, conduits and walls are sealed to prevent leakage of Lead dust from the range into other areas. [1-17a(2)(b)]
- 7 The interior surfaces or the range floor, walls, and ceiling have no protruding Yes edges or devices [DG 415-1, App.A, 3-1d]
- 8. The roof provides ballistic security [DG 415-1, App. A, 3-1e(1)] Yes
- 9 The walls provide ballistic security [DG 415-1, App A, 3-11(1)] Yes
- Yes 10 Interior mortar joints are flush with the interior surface [DG 415-1, App. A, 3-1f(2)]
- Yes 11 The plenum wall is adequately supported and thick enough to avoid flexing [DG 415-1 App A 3-11(4)] Horom (marked by the second secon
- Yes 12. The envelope door to the range is weather-stripped unless the door acts as passive make-up air intake [DG 415-1 App A 3-11] Contract, minute house allowing the conner flash success top at
- B. Range Lighting

who is a garde when the general file

* we strange the way proved a withing the Circlet Smither particular in this country the haday and y no

<i>y</i> ·			BEST AVAILABLE COPY
Y	es	1	Lighting is uniform, non-glaring and does not cause shadows. [1-17c(1)(a)]
	es	2.	Illumination is at least 1 00 foot candles on the targets and 30 foot candles in all other areas. [1-17c(1)(b)]
	es	3.	All lighting is protected by baffles and placed so that the shooter has an unobstructed view down range. [1-17c(1)(c)]
Y	es	4	Downrange lighting begins approximately 18 feet from the firing line and ends approximately 8 feet from the target line [1 -17c(1)(d)]
Y	es	5	Emergency lights are provided behind the firing line and are in working condition. [1-17c(1)(e)]
(Y	es	6.	Exit lights are provided and working as required. [1-17c(1)(f)]
Ŷ	es	7	Lighting of at least 30 foot-candles is provided behind the bullet trap for maintenance (if applicable). [1-17c(1)(g)]
G	'es	8	No known electrical hazards exist in the range. [1-17c(2)(c)]
c	C. E		et Traps
6	res		A bullet trap is permanently installed in the range. [1 -17d(1)(a)]
0	/es		Bullet traps are of a commercial design, which is in compliance with the requirements of CEHND 1110-1 -18, NGB-ARI, NG PAM 385-6. Chapter 4 and this regulation. [1 -17d(1)(b)]
Ć	res		The thickness of inclined plate/sand trap type bullet trap shall be adequate to attenuate the maximum caliber of ammunition authorized to be fired on the range [1-17d(1)(c)]
0	Yes		All plate/sand trap type bullet traps are designed to prevent ricochets by directing the projectiles in the same direction they are traveling. [1-17d(1)(d)]
1	Yes		Sandpits in plate/sand trap type backstops extend to a point circletty set of the sloped plate. [1 -17d(1)(e)]
	Yes		Forward edges in a louver or venetian blind type bullet trap are maintained in a knife edge condition to prevent, ricochets. [1 -1 7d(1)(f)]
C	Yes	7	Steel bullet traps are not bowed, punctured or severely pitted. [1 -17d(2)(a)]
	Yes		Plates in the bullet trap are flush with the other plates. Mold seams are ground smooth [1-17d(2)(b)]
	D. '	Tar	gets and Target Carriers

- Yes 1 A larget retrieval system is operable in all lanes. [1-17e(1)(a)] (Any one firing lane without a retrieval system shall not be used for firing)
- Yes 2 The target retrieval system is constructed in such a manner as to minimize flat surfaces exposed to the firing line. [1-17e(1)(a)]
- Yes 3 Only paper largets are used in the range [1-17e(1)(b)]

E. Range Use

- Yes 1 The range is not used for any purpose other than firing. [1-18a]
- Yes 2 No equipment or furniture is stored or maintained in the range, plenum area or behind the bullet trap. [1-17d]
- Yes 3. No additional clothing or equipment is brought into the range [1-19h]
- Yes 4 Personnel are not permitted in the plenum area during firing even if designed for observation. [1-19a]
- Yes 5 Individuals other than maintenance and inspection personnel are not allowed to walk downrange. (Except in regularly cleaned area as needed to pick up brass) [1-19f]
- Yes 6 All areas directly in front of the plenum walls are kept clear at all times. [1-19c]
- Yes 7 Pellets, BBs, magnum and armor piercing rounds are not used in the range [1 - 1 9g] On known of the range of the ran
- Yes 8 The ventilation system is in operation at all times during firing or cleaning. [1-18c]
- Yes 9 A hand-held ABC-type fire extinguisher is located in a recessed cabinet near the entrance door, inside of the firing range [DG 415-1, App A, 4-5]

F. Range Maintenance

- Yes 1 Dry sweeping does not occur in the range [1 -1 9e]
 - Yes 2 No brooms are located in the range [1-19e]
- Yes 3 A range custodian is appointed for the range who is fully trained and aware of his/her responsibilities [1-13c]

G. Personnel Protective Equipment

- 1. All personnel in the rangeduring firing wear ANSI approved eye protection. [1-20a] Yes
- 2. All personnel in the range during firing wear ANSI approved hearing protection. Yes 1100 1200 6830 [1-20b] (Jahrmahan, Man

H. Posting of Signs

- 1 The following signs are posted in or in the vicinity of the range. [1-21a]
 - Yes a Eating, Drinking and Smoking are Prohibited
 - Yes b. Dry Sweeping is Prohibiled N=
 - Yes c Wash Hands and Face Immediately Following Firing 1000
 - Yes d The Following Ammunition is authorized for use on this Range
 - Yes e Hearing Protection shall be Properly worn during firing
 - Yes I. Proper Safety Glasses/Goggles shall be worn during firing
 - Yes g. No Furniture or Storage of Items Permitted in the Range
- 2 The following signs are posted on the entrance door to the range: [1-21b]
 - Yes a. Noise Hazardous Area Noo
 - Yes b. Danger Lead Hazard Area
 - Yes c. Pregnant women are not permitted in this Area not
- 3 An illuminated warning sign, which is interlocked with the range ventilation switch, is located outside of the firing range to alert individuals that the range is in use. [1-21c] 100
- 4 Each firing lane is numbered at the firing line and at the bullet trap visible to all shooters [1.210] Bullet trup hus no
- any larma 5 A warning sign is posted outside of the access door to the bullet trap, which warn personnel not to enter. [1 -21e] No porting

I. Range SOP

- The indoor firing range has a written SOP, which is approved by the State Safety and Occupational Health Office [1-10e] 1 Yes Sop aneitide no-
 - 2 The range SOP includes as a minimum the following. [1-22b]
 - . Yes a The requirement for establishment and maintenance of a log of visitors for the indoor firing range
 - Yes b The requirement for and contents of a mandatory safety briefing for all
 - individuals prior to entering the range to be given by a designated competent range safety officer
 - Yes c Work practices including required recommended permissible and banned practices as specified by this regulation
 - Yes d'Instructive guidance foi all range procedures

- Yes e Personnel responsibilities for performing the procedures, for supervising them, and reviewing and updating the SOP.
- Yes f Authorized ammunition for the range.
- Yes g. The requirement for posting of signs IAW section 1-21 of this regulation.
- Yes h Cleaning and maintenance requirements.
- Yes i. Personal protective equipment requirements for maintenance, firing and cleaning

火 J. Recordkeeping

- A visitors log is maintained which includes the following information for all visitors/shooters: [1-14c]
 - Yes a Name and age of shooler.
 - Yes b. Organization (if civilian, include address and phone number).
 - Yes c. Sign in and sign out times
 - Yes d Type of ammunition used and number of rounds fired
- Yes 2. Copies of initial and other previous inspections are available. [1-24a]
- Yes 3. The initial inspection report includes air-sampling data. [1-24b]
- Yes 4. An OSHA compliance program is in place, which covers the required aspects. Note application [1-30a]
- Yes 5. All individuals using the indoor firing range have been provided with a copy of the range SOP or been briefed on the requirements of the SOP, and have signed an agreement to follow the rules stated therein [1-13h] rock and have signed and
- Yes 6. State maintenance officers/custodians have documentation to show that they have been educated to the health effects from exposure to Lead dust [29 CFR 1910 1200 and 29 CFR 1910 1025]
 - Yes 7 Range safety officer(s) is/are designated. [1-13c] Not acchine
 - K. New and Renovated Ranges
 - Yes 1 No doors are installed in the plenum wall
 - Yes 2 Plenum area is at least 4 feet deep 2 23 minute in the second
 - Yes 3 An access door is installed behind the bullet trap
 - Yes 4 Only escalator or rubber bullet traps are installed 100

Part 2, Ventilation Inspection

A. E.	xisti	ng Ranges
Yes	1.	The range has an operational mechanical ventilation system. [1-17b(1)(a)]
Yes	2	The minimum ventilation rate at the firing line in each firing lane is 50 fpm at all levels [117b(1)(b)]
Yes	3	One hundred percent of air is exhausted at or behind the bullet trap. [1 -17b(1)(c)]
Yes	4	Make-up air is introduced into the range behind the shooters [1-17b(1)(d)]
Yes		Air that is introduced through vents into the plenum does not exceed a velocity of 600 (pm. 1 -17b(1)(e)]
Yes	6	Air exiting through holes in the plenum wall has a velocity between 400 and 600 (pm [1-17b(1)(f)]
Yes		The ventilation system is so constructed that air exhausted from the indoor firing range does not enter into another part of the building or any other air supply system [1-17b(1)(g)]
Yes	8	The exhaust exceeds the make-up air by approximately 10% to form a negative air pressure in the range in relation to adjoining areas. [1-17b(1)(h)]
Yes	9	back-up filter [29 CFR 1910.1025(e)(4)(II)]
Yes	10	If air is re-circulated in the range, controls to monitor the concentration of Lead and Carbon Monoxide levels are installed and programmed to bypass the recirculation system automatically if the filter system fails. [29 CFR 1910.1025(e)(4)(ii)]
Yes		The fan(s) in the ventilation system is a single speed fan only [DG 415-1, App A, 3-2a]
Yes		A smoke test of the range shows laminar air flow and no turbulence in the range (See NG PAM 385-16, Appendix E for troubleshooting guidance) [1-18b(1)(k)]
Yes		In non-powered systems, the supply air louvers and exhaust fan are electrically interlocked. [1-17b(1)(I)]
Yes	14	the supply and exhaust fans are electrically interlocked. The
		make-up air (an should start slightly after the exhaust (an [1-1 7b(1)(m))
Yes	15	Range air lemperature is between 65 degrees and 80 degrees Fahrenheit [1-17b(1)m)]

B. New and Renovated Ranges

•

- 1 A manometer is installed leading into the exhaust fan, which is capable of Yes no monometric measuring at least 20 inches of static pressure 200 Marine
- 2 Supply and exhaust fans are electrically interlocked with the downrange lighting Toka Yes Lin
- 3 The face velocity on supplied make-up and exhaust ducts does not exceed 2000 Yes cfm per square fool of duct space to the space
- 4 Passive supply systems have opposing blade louvers. No goosing blade louvers. Yes
- 5 Turning vanes are installed in all duct elbows, which have between 60° and 90° Yes angles challen

Part 3, Air Sampling

- 1. The physical safety inspection, Part 1 of the range inspection checklist, was Yes completed and all requirements met on All requirements Lacin
- The ventilation inspection, Part 2 of the range inspection checklist, was completed Yes 2 ANV and all requirements met on

dia

3. Air sampling has been scheduled for

Print and sign Position:

- 4. Air sampling was completed on.
- 5. Air sample results do not exceed following types of ammunition

mg/m3 (results are attached) for the

A reas

AUT SALL

the inches baing me

- 6 For military personnel exposed less than 30 days per year, this range is classified as: SAFE
- 7 For military personnel exposed more than 30 days per year and for all non-DoD personnel, this range is classified as SAFE

Print and sign	
22	1

Position

Dale

there

N).

mint

Li Fre



DEPARTMENT OF THE ARMY AND THE AIR FORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE, SOUTHWEST 10510 Superfortress Ave, Suite C Mather, CA 95655

ARNG-CSG-IHSW

8 January 2013

MEMORANDUM FOR

Montana Army National Guard, ATTN: Deputy State Surgeon, Montana Medical Detachment, 1956 Mt Majo Street, Fort Harrison, MT 59636-4789

SUBJECT: Industrial Hygiene Site Assistance Visits for FY13

1. The National Guard Bureau, Industrial Hygiene – Southwest (IHSW) will be conducting annual Industrial Hygiene Site Assistance Visits, to include a cursory review of safety related items, for

-Hamilton Armory & Indoor Firing Range (IFR)(CL), 910 West Main Street, Hamilton, MT 59840

-Glasgow Armory & Indoor Firing Range (IFR)(CL), 81 Airport Road, Glasgow, MT 59230 -Indoor Firing Range (IFR)

(CL) 1008 U.S. 191, Malta, MT 59538

(CL) Dawson County Fairgrounds, P.O. Box 1323, Glendive, MT 59330

(CL) 2190 West Holly Street, Sidney, MT 59270

(A) 24 Fleshman Creek Road, Livingston, MT 59407

(A) 350 Airport Road, Belgrade, MT 59714

(CL) 600 Gilman Avenue, Butte, MT 59701

(A) 1900 William Street, Fort Harrison, Helena, MT 59636

(CL) RR2, 773 Airport Road, Lewistown, MT 59457

(A) 1840 U.S. 93, Kalispell, MT 59901

2. The primary purpose of this memorandum is to notify you of the anticipated site visits. We ask that you contact the facilities and coordinate the tentative dates for the site visits. Attached are a Request for Information (RFI)-(IH Site Assistance Visit Questionnaire) and a Memorandum of Instruction (MOI) outlining a tentative schedule and the objectives of our visit and should be forwarded to each facility POC.

3. Secondly, we ask that you contact the contractor within 20 working days to coordinate a tentative schedule. The contractor information is as follows: Mon-Responsive of Network Environmental Systems (NES), Non-Responsive 916-353-2360.

4. Finally, we ask that you provide IHSW personnel with a copy of the finalized schedule and facility POCs.

BEST AVAILABLE COPY

ARNG-CSG-IHSW BEST AVAILABLE COPY SUBJECT: Industrial Hygiene Site Assistance Visits for FY13

5. Questions or comments may be directed to Non-Responsive Non-Responsive Non-Responsive Non-Responsive 1916) 854-1492,

Non-Responsive

NGB, IHSW, CIV Industrial Hygiene

CF: FMO OHN SSO



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Mexico • Nebraska

Industrial Hygiene Site Assistance Visit

Livingston Armory 24 Fleshman Creek Rd. Livingston, MT 59047

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1588 of 1990



DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-IHSW

23 April 2013

MEMORANDUM THRU Montana Army National Guard, ATTN: NOn-Responsive SS), Montana Medical Det Troop Medical Clinic, Room 1009, 1956 WT Wajo Street, Fort Harrison, MT 59636-4789

FOR Commander Livingston Armory, 24 Fleshman Creek Rd, Livingston, MT 59047

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Livingston Armory, 24 Fleshman Creek Rd, Livingston, Montana conducted on 01 November 2012.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Livingston Armory at 24 Fleshman Creek Rd, Livingston, MT on 01 NOV 2012.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1589 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Livingston Armory, 24 Fleshman Creek Rd, Livingston, Montana conducted on 01 November 2012.

correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

 A building inspection of the armory, for asbestos, should be provided and a management plan in place for personnel working at and on the facility, this should be written from that inspection. (para. 4.4) (RAC 3)

b. Record fire extinguishers inspections which should be done monthly and annually with documentation on extinguisher. (para. 4.11) (RAC 4)

c. Housekeeping practices should be improved to help prevent migration of lead dust. Personnel should clean-up after themselves during each episode of weapons cleaning. Utilize the Armory Clean-up SOP included in this report to help improve housekeeping practices. The floor inside of the locker room should be thoroughly cleaned as noted in NG Pam 420-15 (Conversion of Indoor Firing Ranges) (para. 4.1) (RAC 3)

 d. Post warning signage at the entryway(s) to warn pregnant, or nursing women and children under 7 years of age that there is a potential for a lead dust exposure in this facility. (para 4.1) (RAC 3)

6. Violation Correction Log.

 a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

Corrective measures should be implemented and accomplished at the lowest levels
possible. Hazards and Corrective Measures that cannot be corrected at the facility level, and
require assistance from higher headquarters or from the state level, should be elevated to the
Quarterly State/BN Safety Council Meeting for resolution.

 Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

4. Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1590 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Livingston Armory, 24 Fleshman Creek Rd, Livingston, Montana conducted on 01 November 2012.

5. The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the Senior Unit Commander of this Facility and any Co-Tenant Organizations or Units, review and provide assistance with implementation of these recommendations. This will educate the chain of command and allow the unit or co-tenant

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1591 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Livingston Armory, 24 Fleshman Creek Rd, Livingston, Montana conducted on 01 November 2012.

organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at

Non-Responsive

NGB, IHSW, CIV Industrial Hygiene

	1		j.	LIVINGSION ANNO 3, MONGANA	ntana				
CONTROL NUMBER CLOSED	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	SUSPENSE DATE	ACTION OIC/NCOIC	Estimated Cost(s)	DATE CORRECTED	REFERENCES
MTLA-110112-4.1	The lead dust levels on floors in the locker room, converted from an old firing range, exceed acceptable concentrations	Drill floor, Locker room	m	Housekeeping practices need to be improved. The floor inside the locker room should be thoroughly cleaned utilizing NGR 385-15 for IFR cleaning procedures.					29 CFR 1910.1025 NG PAM 420-15
MTLA-110112-4.1	Lead dust exposure	Drill floor, Locker room	67	Post warning signage at the entry for potential lead dust exposure to pregnant females or females of child bearing age and to children.	a.				General duty clause 5(a)(1) & NG PAM 420-15
MTLA-110112-4.4	Building asbestos survey report was not available.	Amary	63	Consult with MT state certified inspector to evaluate the facility for ACM.					General Duty General Duty Clause 5(a)(1) & 29 CFR 1910.1001 & 29 CFR 1926.1101
MTLA-110112-4.4	Asbestos O/M plan was not available.	Atmory	m	Develop and implement a written asbestos Operations and Management plan.					General Duty Gause 5(a)(1); 29 CFR 1910.1001; 29 CFR 1926.1101; TB MED 513
MTLA-110112-4.5	Humidity below ASHRAE recommendations	Armory	4	Increase building humidity to the ASHRAE suggested levels of 20 60%.					ASRAE Standard 55-1992
MTLA-110112-4.6	Insufficient illumination	Locker room	4	Replace burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.					41 CFR 101-20- 107

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1593 of 1990

AI TH STANDARDS		Estimated DATE Cost(s) CORRECTED
ETV AND HE	-	ACTION
thwest Log WITH SAFF	intana	SUSPENSE DATE
Industrial Hygiene Southwest <u>Violation Inventory Log</u> LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS	Livingston Armory, Montana	HAZARD COUNTERMEASURE
RECTIV		RAC
DF CORI		SITE
LOG OF SCHEDULE (HAZARD DESCRIPTION
		CONTROL NUMBER CLOSED

.

Reference DA FORM 4754

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- Final rinse should be with clean water only -after mop heads have been cleaned.

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

 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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)
 - 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. <u>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.</u>

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.

Industrial Hygiene Site Assistance Visit Livingston Armory Livingston, Montana 1 November, 2012





www.nesglobal.net



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1599 of 1990

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

LIVINGSTON ARMORY 24 FLESHMAN CREEK ROAD LIVINGSTON, MONTANA 59047

November 1, 2012

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1374.68

Prepared by:



Reviewed by:

Non-Responsive

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1600 of 1990

Table of Contents

EXEC	UTIVE S	SUMMARY						
1.0	INTRO	DDUCTION2						
	1.1	IHSAV Objectives						
	1.2	Scope of Work						
2.0		ESS DESCRIPTION						
3.0	METH	IODS4						
	3.1	Lead Wipe Sampling4						
	3.2	Painted Surface Evaluation						
	3.3	Water Damage and Limited Visual Fungal Growth Evaluation						
	3.4	Asbestos Documentation						
	3.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality 4						
	3.6	Illumination Level Monitoring5						
	3.7	3.7 Hazardous Material Storage and Use Procedures						
	3.8	Safety Training and Record Keeping5						
	3.9	Exhaust Ventilation Survey5						
	3.10	Sound-Level Measurements5						
	3.11	Safety Walk-Through5						
	3.12	Equipment Used						
	3.13	Quality Assurance						
4.0	FIND	NGS AND RECOMMENDATIONS						
	4.1	Lead Wipe Sampling						
	4.2	Painted Surface Evaluation						
	4.3	Water Damage and Limited Visual Fungal Growth Evaluation						
	4.4	Asbestos Documentation						
	4.5							
	4.6	4.6 Illumination Level Monitoring						
	4.7	Hazardous Material Storage and Use Procedures9						
		4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets						
		(MSDS)						
		4.7.2 Flammable Storage Cabinets10						
		4.7.3 Flammable and POL Storage						
	4.8	Safety Training and Record Keeping10						
	4.9	Exhaust Ventilation Survey11						
	4.10	Sound-Level Measurements11						
	4.11	Safety Walk-Through						
5.0	PROJ	ECT LIMITATIONS						
6.0	PROJ	ECT APPROVAL						

Page 1601 of 1990

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau

Appendices

Appendix A References Appendix B Assessment Criteria Appendix C Photo Log Appendix D Chemical Inventory Floor Plan /IAQ - Temp, RH, & CO2 Monitoring Appendix E Ventilation Data Appendix F Appendix G Field Notes Calibration Certificates Appendix H Air Sampling & Metal/Lead Wipe Tables Appendix I Laboratory Reports Appendix J **Employee** List Appendix K IHSW Violation Inventory Log Appendix L Hazard Assessments Appendix M Recommendations Appendix N DD Forms 2214 Appendix O IHSW Lead-Cleanup SOP Appendix P Facility Information Worksheet Appendix Q Installation Status Report (ISR) Appendix R

NES, Inc. NES Job Number: 013.1H1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1602 of 1990

EXECUTIVE SUMMARY

On November 1, 2012, Non-Responsive industrial Hygienist of NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Livingston Armory located at 24 Fleshman Creek Road in Livingston, Montana. The primary point of contact for information gathered during this survey was Non-Responsive I may be reached by phone at (406) 222-1381 or by email at Non-Responsive

The objectives of this IHSAV were to perform the following activities:

- · Evaluate configuration of battery storage and charging facilities;
- · Review hazardous material storage and use procedures;
- Review the Respiratory Protection Program and respirator use/storage;
- · Collect area and breathing zone air samples;
- · Collect metal surface wipe samples;
- Measure the volumetric flow of local exhaust ventilation systems;
- Monitor employee noise exposures through noise dosimetry and source measurements;
- Measure illumination levels;
- · Collect indoor air quality data;
- · Evaluate any existing safety hazards; and,
- Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest -Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: Non-Responsive went above and beyond expectations to help NES complete the IHSAV.

IHSAV Livingston Armory Posted to NGB/FOIA/Reading Room May, 2018 Page I of 13

NES, Inc. NES Job Number: 013 IH1374.68

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1603 of 1990

1.0 INTRODUCTION

On November 1, 2012, Non-Responsive dustrial Hygienist of NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Livingston Armory located at 24 Fleshman Creek Road in Livingston, Montana. The primary point of contact for information gathered during this survey was **Non-Responsive** may be reached by phone at (406) 222-1381 or by email at patrick.muhill@us.army.mil.

1.1 IHSAV Objectives

The objective of the IHSAV is to evaluate the occupational environment of the administrative areas in the Armory to determine the presence of operational health and safety risks and make recommendations for corrective actions or follow-up work to assist the Army National Guard in managing those risks.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- · Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the armory for water damage and the presence of fungal growth;
- Review asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the condition of the Heating, Ventilation, and Air-Conditioning system and collect indoor air quality data;
- Review hazardous material storage and use procedures;
- · Review safety training, and record keeping;
- · Perform a ventilation survey on the kitchen stove hood (if present);
- · Perform a noise survey on the kitchen appliances; and,
- Conduct a safety walk-through evaluation and note any existing safety hazards.

NES, Inc. NES Job Number: 013.IH1374.68

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1604 of 1990

2.0 PROCESS DESCRIPTION

The Livingston Armory has one full time guard member. The 143rd Military Police Detachment is assigned to this facility. The Armory has offices used for administrative purposes. The building also contains the following: a drill floor; gym; storage rooms; a kitchen; and a locker room. The locker room was formerly the indoor firing range (IFR). A janitorial service cleans and services the floors every six months. The janitorial service is the only civilian activity that takes place at the Livingston Armory. The supply room is occasionally used by Army National Guard members as a staging area to clean weapons.

IHSAV Livingston Armory Posted to NGB/POIA/Reading Room May, 2018 Page 3 of 13

NES, Inc. NES Job Number: 013.IH1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1605 of 1990

3.0 METHODS

3.1 Lead Wipe Sampling

Lead wipe samples were collected on horizontal work and floor surfaces in various locations throughout the Livingston Armory. Ghost Wipe[™] brand wipes were used by wiping a one square foot template. The collected wipe samples were placed in clean and labeled centrifuge tubes. Samples were submitted to ALS Environmental Laboratories located in Salt Lake City, Utah for analysis, using NIOSH method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.

3.2 Painted Surface Evaluation

The interior and exterior of the Armory was visually inspected for peeling paint on the walls and ceilings. No paint chip samples were collected because peeling paint was not encountered during the IHSAV.

3.3 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the Armory was visually inspected for water damage and subsequent fungal growth resulting from moisture. Water impacted areas, if observed, were noted for a follow-up evaluation.

3.4 Asbestos Documentation

An evaluation of asbestos documentation was performed. This evaluation consisted of determining if an asbestos building survey and assessment have been done.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation, and air-conditioning systems that serve the Armory was accomplished. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system was performed to note any obvious operational problems.

Carbon dioxide (CO₂), temperature, and relative humidity were measured throughout the Armory using a TSI Model 8551 IAQ-Calc^M Monitor. The unit was calibrated before use with certified zero gas and 1,000-ppm CO₂ span gas. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces.

NES, Inc. NES Job Number: 013.IH1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1606 of 1990

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the Livingston Armory. The instrument used for the illumination survey was a Konica Minolta Illuminance Meter, model TL-1. Measurements taken were obtained at typical working locations such as desks, computers, workstations and general working areas. See Appendix E for illumination data.

3.7 Hazardous Material Storage and Use Procedures

A review of the Armory's chemical inventory and material safety data sheet (MSDS) file was accomplished. Chemical storage areas, i.e., flammable storage cabinets/rooms were also inspected as part of this IHSAV.

3.8 Safety Training and Record Keeping

An inspection of the Armory's training programs and training documentation was performed to determine if the site specific training programs and annual documentation is current.

3.9 Exhaust Ventilation Survey

Air velocity and flow measurements were not conducted at the Livingston Armory. The ducting, for the three canopy hoods in the kitchen, was blocked-off.

3.10 Sound-Level Measurements

Sound-level measurements were made on kitchen appliances using a Quest Model 210 Sound Level Meter in the A weighted decibel (DBA) range, using a slow meter response. DD Forms 2214 are provided in Appendix O.

3.11 Safety Walk-Through

A safety walk-though evaluation of the Armory was performed to document the presence of a fire alarm, to determine if fire extinguishers are properly mounted and are current on their monthly and annual inspections, inspection of ground fault circuit interrupter (GFCI) electrical outlets, if eyewash stations inspections are current, and to document any fire or safety hazards in the Armory.

3.12 Equipment Used

The following equipment was used for this survey.

Туре	Model Number	Serial Number	Calibration Date
Konica Minolta Illuminance Meter	TL-1	00279029	May 2012
TSI IAO-Calc [™] Meter	8551	51380	November 2012
Quest Sound Level Meter	210	DCF01012	March 2012

IIISAV Livingston Armory Posted to NGB/FOIA Reading Room May, 2018 Page 5 of 13

NES, Inc. NES Job Number: 013.1H1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1607 of 1990 Please see Appendix H for a complete inventory of calibration certificates used during this IHSAV.

3.13 Quality Assurance

NES employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and,
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

NES, Inc. NES Job Number: 013.IH1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1608 of 1990

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Wipe Sampling

Wipe samples for lead dust, were collected from horizontal surfaces in selected representative areas of the Livingston Armory to determine if housekeeping efforts are successful. The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot (μ g/ft²) as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 μ g/ft² is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

A total of ten Ghost WipeTM lead samples were taken during the time of the IHSAV. The first five samples were collected from the center and the four corners of the drill floor surface areas. The analytical result for the sample collected from the center of the drill floor was 71 μ g/ft². This value exceeds the 40 μ g/ft² criterion.

Additional lead wipe sampling was taken from approximately 25% of the rest of the building. The four additional areas sampled were the following: the converted IFR floor (NW corner); the converted IFR floor (NE corner); the storage room floor; and the IT room floor. The analytical results for the storage room floor and the IT room floor were below the 200 μ g/ft² criterion. The two lead wipe samples that were collected from the locker room (converted firing range) floor were exceeded the 200 μ g/ft² criterion. The analytical results are provided in the table below.

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard (µg/ft ²)
110112-AFCR-LIV-01	Drill Floor	Southeast corner, floor sample	3.9	≤ 40
110112-AFCR-LIV-02	Drill Floor	Southwest corner, floor sample	17	≤ 40
110112-AFCR-LIV-03	Drill Floor	Northwest corner, floor sample	5.6	≤ 40
110112-AFCR-LIV-04	Drill Floor	Center, floor sample	71	≤ 40

IIISAV Livingston Armory Posted to NGB/FOIA Reading Room May, 2018 Page 7 of 13

NES, Inc. NES Job Number: 013.IH1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1609 of 1990

110112-AFCR-LIV-05	Drill Floor	East side at bay door, floor sample	25	≤ 40
110112-AFCR-LIV-06	Locker Room (converted IFR)	Northeast corner, floor sample	910	≤ 200
110112-AFCR-LIV-07	Locker Room (converted IFR)	Northwest corner, floor sample	1,100	≤ 200
110112-AFCR-LIV-08	Storage Room	North center, floor sample	26	≤ 200
110112-AFCR-LIV-09	IT Room	At entrance to room, floor sample	16	≤ 200
110112-AFCR-LIV-10	Blank Control Sample	-	< 2.5	NA

See Appendix I, table 1 for lead wipe sampling analytical results. Analytical laboratory reports are available in Appendix J.

4.2 Painted Surface Evaluation

No paint chip samples were collected in the interior because no peeling paint was observed.

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

During the inspection of the facility minor water staining of the ceiling tiles was observed in various locations. These stains appeared to be old and showed no current signs of water intrusion. Our primary point of contact stated that the roof of the facility was replaced approximately two years ago. Our point of contact indicated that since the replacement of the roof there have been no issues with water leaks.

4.4 Asbestos Documentation

At the time of the IHSAV, the building asbestos survey and asbestos operations and management documentation could not be produced. The Livingston Armory contains suspected asbestos containing materials including: the 12" floor tiles; the mastic; and the 2' x 4' ceiling tiles.

4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

The heating ventilation and air-conditioning (HVAC) systems were all functioning and up to date on maintenance and inspections during the time of the IHSAV. All heating and cooling air is direct-ducted to the offices and the drill floor. Additionally, there are radiant heaters supplied by a gas fired boiler located in the orderly room, front hallway and the classroom.

The average outdoor carbon dioxide concentration at the time of the IHSAV was 262 ppm. Therefore, the maximum indoor CO₂ level recommended by the ASHRAE Standard would be 862 ppm. Carbon dioxide concentrations throughout the facility were below 862 ppm. The highest CO₂ concentration measured was 314 ppm in the classroom.

Page 8 of 13

NES, Inc. NES Job Number: 013.IH1374.68

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1610 of 1990 ASHRAE recommends maintaining temperatures between 68 and 75°F. Relative humidity should be maintained between 30% and 60% to minimize the growth of allergenic or pathogenic organisms. Building air temperatures ranged from 69.7 to 74.9°F and relative humidity measured between 20.2% and 24.8% during the testing period.

IAQ data is included in Appendix E.

4.6 Illumination Level Monitoring

Illumination levels were measured throughout the facility. The numbers represent the illumination level in foot-candles (FC). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or workbench were taken at waist level.

The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 FC is the minimum lighting requirements for the performance of tasks where reading is required, 30 FC is required for work areas where reading is not required, 10 FC is required for non-work areas, such as aisles and corridors, and 5 FC is required for walking surfaces, such as mechanical spaces.

Illumination on the drill floor ranged between 36.1 and 45.7 FC. Illumination in the classroom, library and offices measured between 79.2 and 154.7 FC. The illumination in the locker room (converted indoor firing range) ranged from 8.5 to 147.6 FC. Based on the above criteria, the lighting in the locker room (converted indoor firing range) is inadequate for tasks being performed.

4.7 Hazardous Material Storage and Use Procedures

4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS)

Inventories of all hazardous materials used by the Livingston Armory along with their associated Material Safety Data Sheets (MSDSs) are maintained in a master binder located in the storage room. The master chemical inventory and MSDS binder is arranged by a Federal Stock Class and National Stock Number (NSN). The inventories and MSDSs are arranged by product location on the shelf, using alphanumeric designations. Copies of the Armory's chemical inventories are provided in Appendix D.

Page 9 of 13

NES, Inc. NES Job Number: 013.IH1374.68

4.9 Exhaust Ventilation Survey

Air velocity measurements were not collected from the kitchen canopy hoods because they were sealed shut and not being used.

4.10 Sound-Level Measurements

Sound-level measurements were verified on kitchen appliances and the kitchen door closing. The following lists the noise level measurements obtained during this visit:

Noise Source	Noise Level Measurement
Kitchen Appliances	68-69.2 dBA at operator ear level
Door Shutting Abruptly (Mechanical Room)	82.4 dBA at operator ear level
Mechanical Room	62.4 dBA at operator ear level

DD Forms 2214 are provided in Appendix O.

4.11 Safety Walk-Through

- 1. Housekeeping throughout the facility was good.
- Fire extinguishers are strategically located in the hallway and throughout the drill floor. Fire extinguishers were up to date for annual inspections as of Nov 2012.
- The fire evacuation plan is prominently posted throughout the building. Egress routes are marked on the fire evacuation plan.
- 4. GFCI electrical outlets functioned properly when tested.
- Ear plugs, a first aid kit, and a defibrillator unit were properly mounted and accessible on the wall in the drill floor area.
- 6. A brown colored, fine grain, soil was identified accumulating around window and exterior door openings. A sample was taken and analyzed for naturally occurring asbestos. Laboratory results showed the soil sample was negative for asbestos.

Sample Number	Sample Description	Sample Location	% Asbestos
110112-AFCR-LIV-11	Fine grain soil, brown in color	Collected from exterior door openings and windows	ND

ND = none detected at or above the analytical detection limit

APPENDIX A

REFERENCES

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.

American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment

- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process
- AR 385-10, The Army Safety Program
- Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

TB MED 503, The Army Industrial Hygiene Program

- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

APPENDIX B

ASSESSMENT CRITERIA

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Occupational Exposure Limit

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).

PHOTO LOG ARMORY, LIVINGSTON LIVINGSTON, MT NOVEMBER 1, 2012



Photo 1: Exterior of the Livingston Armory building.

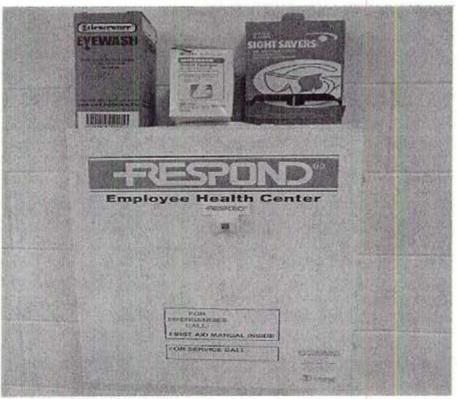


Photo 2: First aid kit station.

PHOTO LOG ARMORY, LIVINGSTON LIVINGSTON, MT NOVEMBER 1, 2012



Photo 3: Storage room.

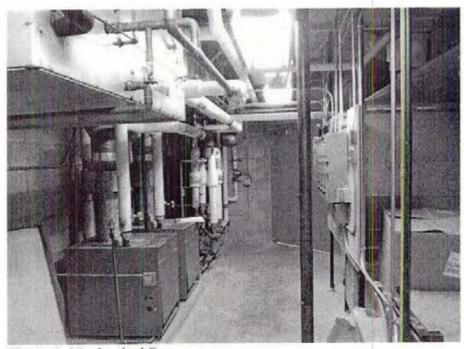


Photo 4: Mechanical Room.

PHOTO LOG Armory, Livingston Livingston, MT November 1, 2012



Photo 5: Drill floor.

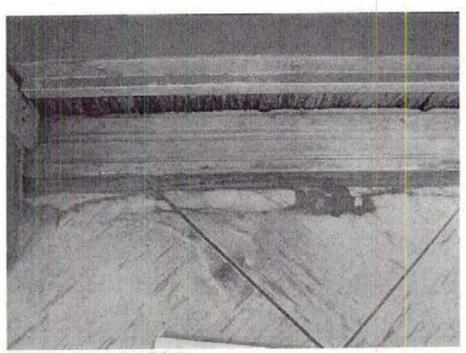


Photo 6: Accumulated dust.

PHOTO LOG ARMORY, LIVINGSTON LIVINGSTON, MT NOVEMBER 1, 2012



Photo 7: Locker room which was previously a firing range.



Photo 8: Blocked kitchen hood.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1618 of 1990

PHOTO LOG ARMORY, LIVINGSTON LIVINGSTON, MT NOVEMBER 1, 2012



Photo 9: Small blocked off kitchen hood.

4

Montana ARNG Hazardous M

Print Inventory

Print Inventory Cancel

Storage: STORAGE ROOM Unit: 143rd MP DET

Month: 12/1/2011

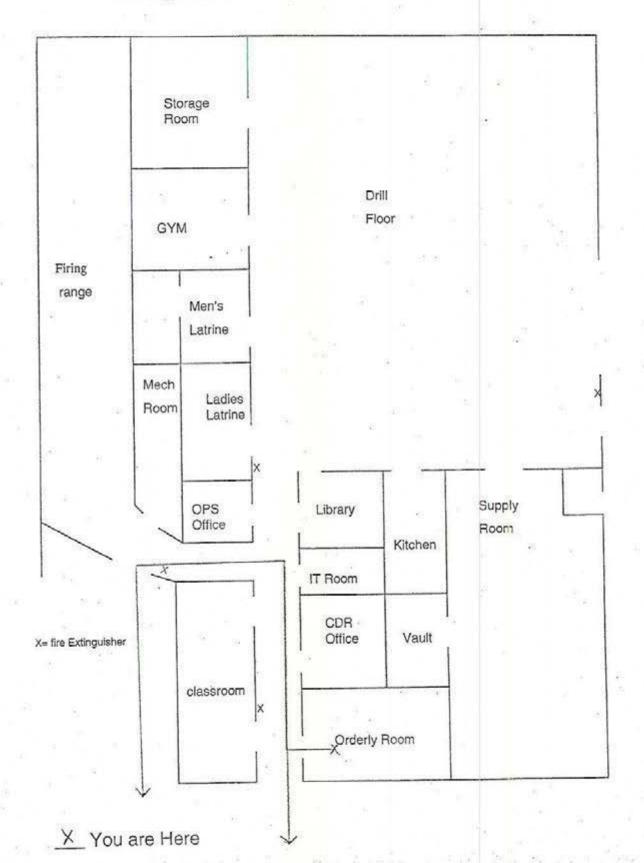
SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
X	Aerosol laquer, black	8010-00-582-5382	So-Sure		2	Can	-	
	Aerosol laquer, Grey	8010-00-721-9750	So-Sure		1	Can		
ě.	All Purpose Cleaner	7930-00-926-5280	Skillcraft		46	bottles		
e-1005	Bowl cleaner	unk	Vani-Sol	12	5	Bottles		E
	CLP	9150-01-053-0688	Unknown		2	Bottles		
	Concentrated Cleaner	unk	Simple Green		6	bottle		
1	Disinfectant Cleaner	6840013424143	Skillcraft		20	Bottle		
	Floor Finish	unk	Maintenance One	14	1	Gal		
	Floor Finish	7930-01-131-5648	Metalist	-	5	Gallon	Anna an ch	
-	Floor Stripper	Unk	Butchers		1	can		×.
	Floor/Mop Treatment	local purchase	Montana Deluxe		2	Gal		
17.104	General Purpose Cleaner	local purchase	SC Johnson		1 .	Gal		(e)
-	Interior Acrylic Finish	unk ·	Columbia		1	can	2	

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 12/23/2011 Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT) May, 2018 Released by National Guard Bureau Page 1620 of 1990

BEST AVAILABLE COPY rials Inventory Database: Print Invent

Odor Counteracting Spray	unk	Good Sense	3	• can	GH (
paint, aerosol, black	8010-01-331-6108	Skillcraft Industrial	11	Can	
paint, aerosol, white	8010-01-331-6106	Skilicraft Industrial	11	Can	ľ.
Paint, appple cider	unk	Columbia	1	can	-
paint, green	21-011-NB	Columbia	1	can	
paint, satin	unk	Krylon Fusion	. 1	Can	
paint, white	02-042-W8	Columbia	1	Can	
Paint, White	B21-W-221	Sherwin Williams	2	can	
Powdered Hand Soap	unk	Pepco 418	3	box	
Primer/Sealer	unk	Columpia	1	can	
Primer/Sealer	unk	Insl-x	1	can	
Quick-Solv	7930-00-F01-6389	Ajax	6	Bottle	15
Renown Furniture polish	unk	Am San	3	Can	
Skin Cleanser	unk	Betco	3	Gal	
Special Glass Cleaner	unk	Am San	2	Gal	
Toilet Soap	8520-00-228-0598	LHB	4	GAL	<i></i>
Wax Stripper	unk	Masterpiece	2	Gal	

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 12/23/2011 Posted to NGB FOIA Reading Room May, 2018 Released by National Guard Bureau Page 1621 of 1990



Livingston Armory Fire Evacuation Plan

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1622 of 1990

ILLUMINANCE SURVEY

LIVINGSTON ARMORY LIVINGSTON, MT NOVEMBER 1, 2012

Building	Location	Light - FC	Minimum lighting requirements – FC
Armory	Northeast Corner of Drill Floor	36.1	30
Armory	Southwest Corner of Drill Floor	45.7	30
Armory	Storage Room	36.1	30
Armory	Gym	38.9	30
Armory	North side of Locker Room	8.5	10
Armory	Center of Locker Room	147.6	30
Armory	OPS Office	116.4	50
Armory	Hallway South of OPS Office	55.8	10
Armory	IT Room	44.8	50
Armory	Kitchen	140.8	50
Armory	Supply Room	34.8	30
Armory	Classroom	57.2	50

*FC= foot candle measurement

IAQ MEASUREMENTS

LIVINGSTON ARMORY LIVINGSTON, MT NOVEMBER 1, 2012

Location	CO2 max permissible level 862 ppm	Temperature permissible range 68 - 75⊕F	RH% permissible range 30-60%
Drill Floor	278	74.1	20.2
Storage Room	279	72.4	22.4
Gym	280	73.4	21.7
Mechanical Room	295	73.9	22.0
Locker Room	280	73.4	20.8
OPS Office	280	73.9	20.5
IT Room	284	74.3	20.5
Kitchen	280	69.7	24.8
Supply Room	281	70.1	24.6
Classroom	314	74.9	22.4
Outside	262	64.8	20.3

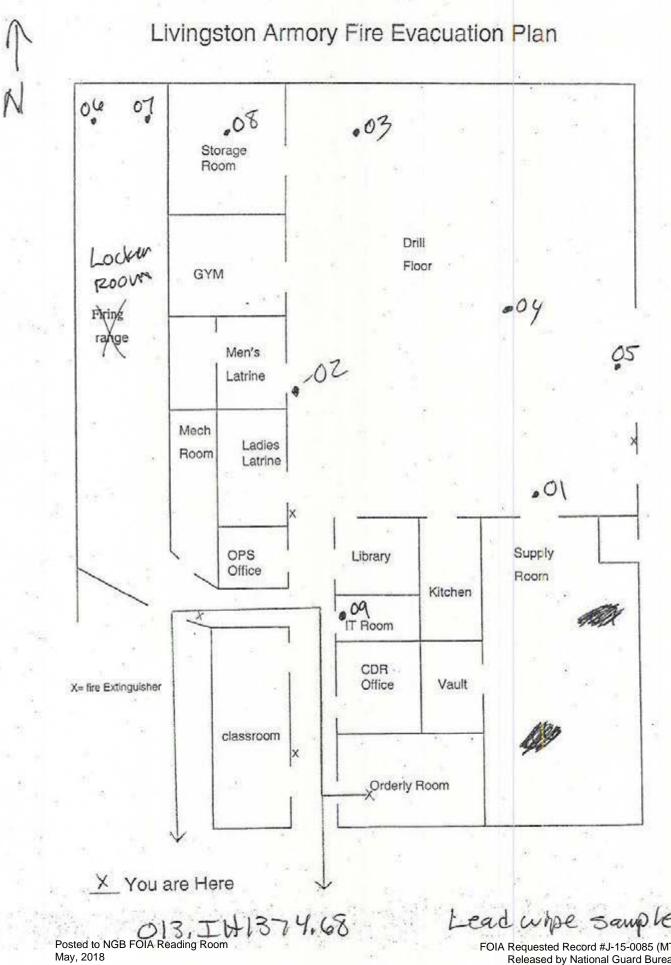
CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

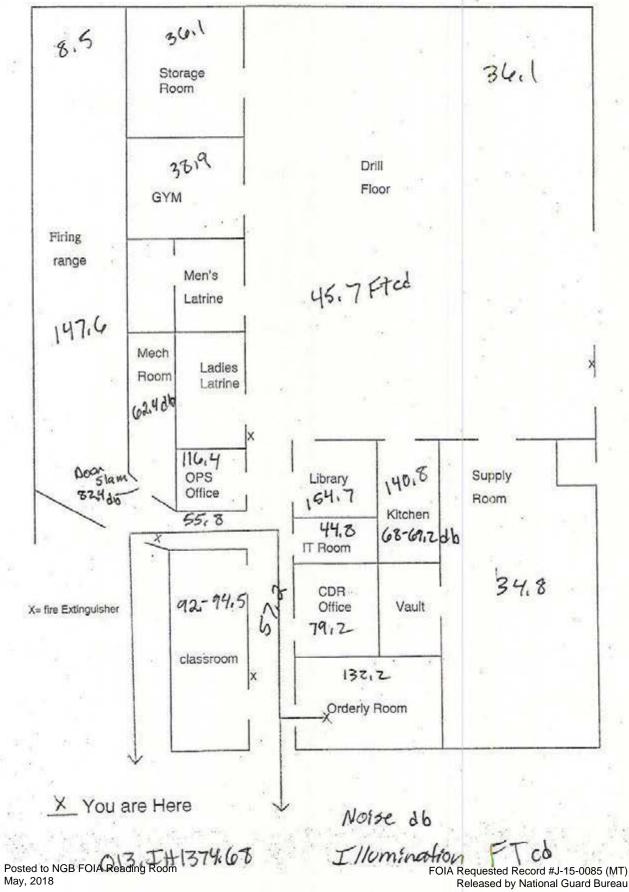
CO = Carbon Monoxide

STEL = Short Term Exposure Limit



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1625 of 1990

Livingston Armory Fire Evacuation Plan



Released by National Guard Bureau Page 1626 of 1990

11-1-12 013. IH1374.68 Lington MJ 3 Vehicles - Hummens & 3 cargo trailers No vehicle maintenance performed here Used Only 3 or 4 Hunes a yean No heapons. Gued - firing range has been converted to a locker room Weapons cleaned in supply room 3 Canopy Vents in Kitchen but are all blocked off & not used, Kitchen stove not used Storage Room - 1 Flam cabinet W/inventory list & MEDS, Also 3 lockers w/ deaning supplies & chemicals SUSPECT ACM - 12" Floor tile, cove mastic, ZXY C. T Heat is radiant heat fungas Ared boilers All Fradiant heat in Ordenly rm, fout Hall, 1g classroom good Cond Central HVAC provides AC & Heat Maintained by State Facilities Management Dept. Notse- ain compresser in mech noom - but looks dosconnected & Adutck says never used Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT)

May, 2018

Released by National Guard Bureau Page 1627 of 1990

4

Page 1628 of 1990

MT 11-1-12 Livingdon Hazlog lnigt plan No Acm survey Pb warning signage in locker Am needed Blood borne pathogen SOP program No . Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT) May, 2018 Released by National Guard Bureau

ŵ.

ARNG Site Assistance Visit Checklist

General Information
Facility: Armony - Living 6ton MJ
Physical Address: 24 Fleshman creek Rd
Number of Employees: [_FJIHime Dates: 11-1-12
Standard Items
IAQ: Illumination: Lasers: MO
Jack Stands: None observed CO Monitors: 405
Bloodborne Pathogens: No Confined Spaces Confined Spaces
LOTO: Equipment available: 1/4 Equipment used: Office equipment
Cranes/Hoists: 1/1/A Fall Protection:
Respirators: Notused
Hearing Protection: located in drill Flown area
Flammables Cabinets: Lin supply room -mods, inunking lat & cabinet OK
Radon Detectors: None
Fire Extinguishers serviced: OK Inspected: OK
Ventilation Door Open on
Paint Booth: N/A Work Bays: passfire Welding: N/A
Soldering: NONE Carpenter: M/A Other?:
Noise ,
Noise Dosimetry: NO
SPL Measurements: Pneumatics: N/A
Welding: N/A
Machinery: N/A
Vehicles: Not being wad at time of inspection
the my car at time at the pector

Sampling	
Welding:	MIG: N/A
	TIG: _NA
	Stick: _///A
	Plasma Cutting: NA
	Stainless: _/V/A
	Galvanized: N/A
Painting:	CARC: N/A
	Chromates: NA
	Solvents: MA
Lead:	Wipes: 405 - 9 wipes + B Mult
	Soldering: N/A
	Paint Removal: NA
Particulates:	Wood Working: M/A
Solvents:	Lubrication: N/A
Documentation	Army Sacrety Programs AR-385-10
Fire Prevention a	Army Safety Programs AR-385-10 ind Evacuation Plan: In every room posted & uniter
Drogram	
	ection: Spirometry: <u>No</u> Fit tests: <u>No</u>
Whi Han	program only
	ication: 425, included in 143" Military Blice Det
/US Arm	
Hearing Protection	
Protective Eyewe	1184
Tiolecuve Lyew	ar. 707
Job Safety Apoly	sis / Hazard Assessments: 489
Job Balety Analy	sis/ Hazard Assessments. 407
Harmat @	Alo BBP Procedues/tratuly tu SOP
PPE 500	NO DE Procesues finding
LO/TO Proc	edues
concined sp	
Lead - Acid	Belloy safety
Ergonanic	
Posted to NGB FOIA R May, 2018	eading Room FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau

Released by National Guard Bureau Page 1630 of 1990 14 h

Tekt Service Solu	tronix ntions			of Calibration 6209119
Company ID: 607 INDUSTRIAL HY 10510 SUPERFO MATHER, CA 95	GIENE SW	Instrument Identif	ication PO Number:	Certificate Page I of I
	H225438 KONICA MINOLTA ILLUMINANCE METER		Model Number: TL-1 Serial Number: 00279029	×.
		Certificate Inform	nation	
Reason For Service:	CALIBRATION	Contraction	Technician:	Non-Responsive
Type of Cal:	NORMAL			2ZIMOYZOTZ
As Found Condition:	IN TOLERANCE		Cal Due Date:	
As Left Condition:	IN TOLERANCE		Interval:	12 MONTHS
Procedure:	MINOLTA T-1M ILLUMIN	ANCE METER	Temperature: Humidity:	
Remarks:				

Tektronix Service Solutions certifies the performance of this instrument has been verified using equipment of known accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the International System of Units (SI), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL Z540.1-1994. The quality system is registered to ISO9001.

This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

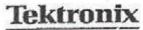
Approved By: Service Representative

		Calibra	ation Standards			
NIST Traceable#	Inst. ID#	Description	Manufacturer	Model	Cal Date	Date Due
1700230826	17-1001076	5 STEEL RULE	STARETT	C415R-72	10Jun2010	10Jun2012
1700276206	17-2007214	1000W LIGHT BULB	OPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
1700201473	4083RC	MULTIMETER	FLUKE	8842A	25Jul2011	25JJI2012
1700201472	461952	CURRENT SHUNT	LEEDS & NORTHRUI	4360	09Aug2011	09Aug2012

6120 Hanging Moss Road - Orlando, FL 32807 · Phone: 800-438-8165 · Fax: 407-678-4854

A

BEST AVAILABLE COPY



Service Solutions

DATASHEET

Manufacturer: Minolta

Workorder #: 602492

Model: TL-1

Procedure: Manufacture

Description: Illuminance Meter

Date:	22-May-12
-------	-----------

Range	Nominal Value	As Found	Result	As Left	Result	Min	Max
30fC (resolution: .1 fC)	10.00	10.1	P	10.1	Р	9.7	10.3
300 fC (resolution: 1 fC)	100.0	100.1	Р	100	P	97	103
3000 fC (resolution: 10 fC)	1000.0	1000.0	P	999	P	970	1030

Note: Measurement Uncertainty = +/- 2.4% of Indication.

Page 1 of 1

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1632 of 1990

RO PRECISION LIBRATION INC.

MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 (530) 268-1860

Certificate of Calibration

Work Order #:

Serial Number:

Performed By;

Department;

Cal. Date;

Cal. Interval:

Cal. Due Date:

Purchase Order #.

Date: Nov 20, 2012

MFC Control #:

Asset ID:

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

CD3921 1245

Gage Type: LAQ METER Manufacturer; TSI Model Number: 8551 Siza: NIA 66.9 F/ 35.6 % Temp/RH:

Calibration Notes:

Standards Used to Calibrate Equipment

Cal. Due Date Traceability # Model Serial Manufacturer 10. Description. Nov 5, 2013 2008120211043 MULTIFUNCTION PROCESS 726 1355148 FLUKE CC8185 CALIBRATOR Apr 30, 2013 2008120175502 LASER PARTICLE COUNTER METONE 200L-1-115-1 90058781A J2270

Procedures Used in this Event

Description Procedure Name PARTICLE COUNTER

PARTICLE COUNTERS TEMPHUMIDITY METER (FLUKE) 971 071 TEMP/HUMIDITY METER

Calibrating Technician

QC Approval:

2008120221675

Cert No.

SAC-7004499

013.IH1374.00

November 19, 2012

November 19, 2013

12 MONTHS

51380

Received Condition: IN TOLERANCE

Returned Condition: IN TOLERANCE

te to a con e lactor k=2, which for north monil is stated as the standard uno righty of n tainly of measure INIST T EA's Put to 1207, 1004 Ed th 130 (7025:2005, 190 9001:2008, ANSUNCEL Z540-1, MPC Cushity Merical, MPC C6D and Mile co nor purch

omer. Any number of factors may cause an instrumost to drift out of tom ad by the cus of chias, at

igh the Nadonal Institute of Standards and Technology (NST) endor recognized are warranted for no reas then thirty (38) days. This report may not be report to SI two Teeting Mi (CERT, Rev.3)

Page 1 of 1

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1633 of 1990

3M Occupational Health rd Environmental Safety D. .on

IHSW-NGB

Quest Standard By E COPY 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questlechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax

QUEST TECHNOLOGIES NOW PART of 3M

Page 1 of 2

Certificate of Calibration

Certificate No: 1095258DCF010012

Submitted	By:
	-1.

10510 SUPERFORTRESS AVE.

MATHER, CA 95655

Serial Number:	DCF010012	Date Received:	3/28/2012
Customer ID:		Date Issued:	3/29/2012
Model:	210 SLM	Valid Until:	3/29/2013
Test Conditions:		Model Condition	s:
Temperature:	18°C to 29°C	As Found:	IN TOLERANCE
Humidity:	20% to 80%	As Left:	IN TOLERANCE
Barometric Pressure:	: 890 mbar to 1050 mbar		

SubAssemblies:

Description:

Serial Number:

Calibration Procedure: 53V904

Reference Standard (s) :

I.D. Number	Device
ET0000453	FLOKE 45 MULTIMETER
ET0000556	B&K ENSEMBLE

 Last Calibration Date Calibration Due

 3/2/2011
 3/2/2013

 4/27/2011
 4/27/2012

Measurement Uncertainty:

+/- 2.2% ACOUSTIC (0.1908)+/- 1.4% VAC +/- 0.1% VDC Estimated at 95% Confidence Level (k=2)



This report certifies that all calibration equipment used in the test is traceable to NIST or other NMI, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of Quest Technologies.

098-393 Rev. B

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1634 of 1990 3M Occupational Health 1d Environmental Safety D. Jon

3M

QUEBEST AVAILABLE COPY

1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questtechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax



Page 2 of 2

1

Certificate of Calibration

Certificate No: 1095258DCF010012

(A) indicates out of tolerance condition

Test Type	Nominal	Tolerance-	Tolerance+	As Found	As Left	Unit
Calibration	110.0	109.5	110.5	110.0	110.0	dB
A Weighting/125Hz	93.9	92.4	95.4	94.5	94.5	dB
A Weighting/250Hz	101.4	99.9	102.9	102.1	102.1	dB
A Weighting/500Hz	106.8	105.3	108.3	107.2	107.2	dB
A Weighting/1kHz	110.0	109.5	110.5	110.0	110.0	dB
A Weighting/2kHz	111.2	109.7	112.7	111.4	111.4	dB
60 to 130/120	120.0	118.8	121.2	119.9	119.9	dB
60 to 130/110	110.0	109.5	110.5	110.0	110.0	dB
60 to 130/100	100.0	98.8	101.2	100.0	100.0	dB
50 to 120/90	90.0	88.8	91.2	90.0	90.0	dB
40 to 110/80	80.0	78.8	81.2	80.0	80.0	dB
AC out	0.750	0.427	1.072	0.754	0.754	VAC
DC out	1.420	1.353	1.487	1.478	1.478	VDC

* indicates non accredited

098-393 Rev. B

Posted to NGB FOIA Reading Room May, 2018 An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1635 of 1990

TABLE 1 LEAD WIPE SAMPLE RESULTS LIVINGSTON ARMORY NOVEMBER 1, 2012

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard
110112-AFCR- LIV-01	Drill Floor	Southeast corner, floor sample	3.9	≤ 40
110112-AFCR- LIV-02	Drill Floor	Southwest corner, floor sample	17	≤ 40
110112-AFCR- LIV-03	Drill Floor	Northwest corner, floor sample	5.6	≤40
110112-AFCR- LIV-04	Drill Floor	Center, floor sample	71	≤40
110112-AFCR- LIV-05	Drill Floor	East side at bay door, floor sample	25	≤ 40
110112-AFCR- LIV-06	Locker Room (converted IFR)	Northeast corner, floor sample	910	≤200
110112-AFCR- LIV-07	Locker Room (converted IFR)	Northwest corner, floor sample	1,100	≤ 200
110112-AFCR- LIV-08	Storage Room	North center, floor sample	26	≤200
110112-AFCR- LIV-09	IT Room	At entrance to room, floor sample	16	≤200
110112-AFCR- LIV-10	Blank Control Sample		< 2.5	NA

μg/ft² = micrograms per square foot ARNG = Army National Guard ND = none detected at or above the analytical detection limit

Bold = Above ARNG Standard limit



ANALYTICAL REPORT

Workorder: 34-1231122 Client Project ID: 013.IH1374.68/Livingston MT Purchase Order: 013.IH1374.68 Project Manager: Non-Responsive

Analytical Results

Sample ID: 110112-AFCR-LIV-05	Me	Media: Ghost Wipe			11/01/2012
Lab ID: 1231122005 Sampling Location: Livingston MT			Received:	11/06/2012	
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²				11/06/2012 11/07/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)		Station and
Lead	25	25	2.5		

Lead	910	910	2.5		
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)		
Method: NIOSH 7300 Mod.	Sampl	ing Parameter: Ar	Prepared: 11/06/2012 Analyzed: 11/07/2012		
Lab ID: 1231122006	122006 Sampling Location: Livingston MT		Sampling Location: Livingston MT		
Sample ID: 110112-AFCR-LIV-	06 N	ledia: Ghost-Wipe	Collected: 11/01/2012		

Sample ID: 110112-AFCR-LIV-07	Media: Ghost Wipe			Collected: 11/01/2012
Lab ID: 1231122007	Sampling Locat	ion: Livingston M	Received: 11/06/2012	
Method: NIOSH 7300 Mod.	Sampling	Sampling Parameter: Area 1 ft ²		
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	
Lead	1100	1100	2.5	

Lead	26	26	2.5	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Method: NIOSH 7300 Mod.	Samplin	Sampling Parameter: Area 1 ft ²		
Lab ID: 1231122008	22008 Sampling Location: Livingston MT Reco	Sampling Location: Livingston MT		
Sample ID: 110112-AFCR-LIV-0	18 Med	Media: Ghost Wipe		

Sample ID: 110112-AFCR-LIV-09	Media: Ghost Wipe · Sampling Location: Livingston MT			Collected: 11/01/2012
Lab ID: 1231122009				Sampling Location: Livingston MT
Method: NIOSH 7300 Mod.	Sampli	Prepared: 11/06/2012 Analyzed: 11/07/2012		
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	
Lead	16	16	2.5	

IHREP-V10.9



ANALYTICAL REPORT

Workorder: 34-1231122 Client Project ID: 013.IH1374.68/Livingston MT Purchase Order: 013.IH1374.68 Project Manager: Non-Responsive

Analytical Results

Sample ID: 110112-AFCR-LIV-10	Media: Ghost Wipe Sampling Location: Livingston MT			Collected: 11/01/2012
Lab ID: 1231122010				Received: 11/06/2012
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			Prepared: 11/06/2012 Analyzed: 11/07/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)	而大学会的广大。这些问题
Lead	<2.5	<2.5	2.5	

Sample ID: 110112-AFCR-LIV-11 Lab ID: 1231122011		edia: Bulk ition: Livingston MT	Collected: 11/01/2012 Received: 11/06/2012
Method: NIOSH 9002	the second second	A DE MARKEN AND A REAL	Analyzed: 11/07/2012
Analyte	%	RL (%)	
Chrysotile	ND	1.0	
Amosite	ND	1.0	
Crocidolite	ND	1.0	
Actinolite/Tremolite	ND	1.0	
Anthophyllite	ND	1.0	

Report Authorization

Method	Analyst	Peer Review
NIOSH 7300 Mod.	Non-Responsive	Non-Responsive
NIOSH 9002		

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com

Page 3 of 4

Posted to NGB FOIA Reading Room May, 2018 Mon, 11/12/12 11:27 AM BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1638 of 1990

IHREP-V10.9

A ABA	LOG OF SCHEDULE	OF CORRE	CTIV	LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Livingston Armory, Montana	WITH SAFE	TY AND HEA	LTH STAND	ARDS	
	HAZARD DESCRIPTION	SITE	RAC	RAC HAZARD COUNTERMEASURE	SUSPENSE	ACTION OIC/NCOIC	Estimated Cost(s)	DATE	REFERENCES
MTLA-110112-4.1	The lead dust lavels on floors in the locker room, converted from an old firing range, axceed acceptable concentrations	Drill floor, Locker room	ω	Housekeeping practices need to be improved. The floor inside the locker room should be thoroughly cleaned utilizing NGR 385-15 for IFR cleaning procedures.					29 CFR 1910.1025 NG PAM 420-15
MTLA-110112-4.1	Lead dust exposure	Drill floor, Locker room	ω	Post warning signage at the entry for potential lead dust exposure to pregnant females or females of child bearing age and to children.					General duty clause 5(a)(1) & NG PAM 420-15
MTLA-110112-4.4	Building asbestos survey report was not available.	Armory	ω	Consuit with MT stata certified inspector to evaluate the facility for ACM.					General Duly Clause 5(a)(1) & 29 CFR 1910.1001 & 29 CFR 1926.1101
MTLA-110112-4.4	Asbestos O/M pian was not available.	Armory	ŵ	Develop and implement a written asbestos Operations and Management plan,					General Duly Clause 6(a)(1); 29 CFR 1910, 1001; 29 CFR 1926, 1101; TB MED 513
MTLA-110112-4.5	Humidity below ASHRAE recommendations	Armory	4	Increase building humidity to the ASHRAE suggested levels of 20- 60%.					ASRAE Standard 55-1992
MTLA-110112-4,6	Insufficient illumination	Locker room	4	Replece burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.					41 CFR 101-20-107
MTLVAR-110112-4.8	No written program for blood born pathogens	Armory		Develop and implement a blood borne pathogen program.	÷1a				29 CFR 1910.1030(d)(3); 29 CFR 1910.1030(h)(2); DA PAM 385-10 14- 6

Reference DA FORM 4754

Page 1 of 1

BEST AVAILABLE COPY

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Livingston Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Findings and Recommendations; Item 2 – Painted Surface Evaluation).

N4.1 Lead Wipe Sampling

Housekeeping practices need to be improved. Review the Armory SOP for lead cleanup and follow-up housekeeping recommendations. Follow the guidelines for cleaning. Have follow-up testing conducted to ensure lead concentrations have dropped to acceptable levels.

Post warning signage at the entry for potential lead dust exposure to pregnant females or females of child bearing age and to children.

N4.4 Asbestos Documentation

Consult with MT state certified inspector to evaluate the facility for ACM.

Develop and implement a written asbestos Operations and Management plan.

N4.5 Heating, Ventilation, and Air-Conditioning (HVAC) Systems and Indoor Air Quality

Increase building humidity using a humidifier.

N4.6 Illumination

Replace burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.

N4.8 Safety Training and Record Keeping

Develop and implement a blood borne pathogen program.

					(Sc	1.2.5	0.000	SURVEY METER SURV	VEY)						
		-	100 July - 100		1		Canada Canada	2. TYPE SURVEY [DDE)	01	-			
1.	DATE (YYYY	(MMDD)		20120	926	Ì	1-INITIAL SUR				THER	1		
3. SOUND	LEVEL ME	TER	11.0		4. MICRO	PHONE			5. 0	CALIER	RATOR				
Contract of the second s	MANUFAC	10000			Α.	MANUFA	CTURE		1000	A. MANUFACTURE QUEST TECHNOLOGIES					
QUEST	TECHNOL	OGI	3		ATTACHE	D TO SOU	NDLEV	EL METER	QU	EST	TECHNOLO	3IES			
	MODEL	C	SERIAL N	io.	0.011110.0044.00	MODEL	terrar and the	C. SERIAL NO.	D. Q	C-10	MODEL		E. SERI	al No.	
	LECTROAC MMDD)	OUST	IC CALIB. D	DATE		ELECTROA (MMDD)	COUST	IC CALIB. DATE			LECTROACOU MMDD) 2		ALIB. DATI	E	
	CREEN (X	ONE)							7. N	AEASU	REMENTS OB	TAINED	(X ONE)		
	Used		X	NOT USE	D				X		INDOORS		0	UTDOORS	
				HERE NOISE		CONDUCT	ED			9.	PRIMARY SO	URCE	OF NOISE		
Evalua	tion of I	mec	hanical	room					10.	SECO		CE OF	Noise		
11. SOUN	D LEVEL D	ATA			_				12.	PROT	ECTION REQU	IRED (/	RE: dBA +	LEVEL)	
						D.		Ε.		A.	В.		с	D.	
	LOCATION ME AC				C. dBC	dBA	Risi	RISK ASSESSMENT CODE		ONE 5 dBA)	PLUG OF MUFF (85-108)		PLUG AND MUFF (108-118)	PLUG + MUTT + TIN LIMIT (>118)	
Mechani	cal Room	i.		s		62.4				x					
	utting Abri ical Room			s		82.4				х					
									_	_	-	-			
										-		-			
											1				
Notes: Ra	inge of lev	els n	cted by /; i	.e., 102/10 action and	9. At op	erator sta	tions, n	neasure at ear leve	el,			-			
14. More	DETAILED	Nois	E EVALUAT	TION REQUI	RED:			YES	XN	lo (if	Yes," identify	type e	evaluation	needed.)	
13	. NAME(S)) OF F	ERSON(S)	DENTIFIED	FORAUD	IOMETRIC	MONITO	DRING (Use additio	nai sheel	t if ma	ore space is n	eeded	and atlac	to form)	
16. SUPE	RVISOR OF	Nois	E-HAZARD	OUS AREA O		TION									
and a second second	I-Re	73.1.200	Co. 210022100728100		8. TE		(Includ	e area code)	4	1000	RGANIZATION	RY, LIV	INGSTON,	мт	
					, MI)			18. HEARING CO	ONVERSA	TION	MONITOR (La:	t Nam	ne, First, N	11)	
										_			-74		

			(Se			SURVEY METER SURV	EY)					
						2. TYPE SURVEY (EI		01				
1. DATE (Y)	(YYMMDD)		2012	1101		1 - INITIAL SURVI	and the second se		OTHER			
 SOUND LEVEL METE A. MANUFACTU 	and the second se		4. MICR	OPHONE			5. CALIBRATOR A. MANUFACTURE					
QUEST TECHNOLO			an contract to a	MANUF/		LMETER	QUEST TECHNOLOGIES					
B. MODEL 210	C. SERIAL I	1012	Β.	MODEL	-	C. SERIAL NO.	D. QC-1		QIC06008			
 LAST ELECTROACOU (YYYYMMDD) 20120300 		DATE		ELECTRON YMMDD)		CALIB. DATE			USTIC CALIB. D	ATE .		
3. WIND SCREEN (X ON	NE)						7. MEAS	UREMENTS OF	TAINED (X ONE)		
USED	ID X NOT USED X INDOORS								OUTDOORS			
B. DESCRIPTION OF AR (Illustrate on addition)				CONDUC	TED		9. MECHA		URCE OF NOIS			
Evaluation of ki	tchen app	oliances			3		10. SEC	ONDARY SOUR	CE OF NOISE			
11. SOUND LEVEL DAT	A				-		12. PR01	TECTION REOL	IRED (RE: dBA	+ LEVEL)		
А.		В.	c.	D.		Ε.	A.	В.	C	D.		
LOCATION	METER ACTION	dBC	dBA	Risk	ASSESSMENT CODE	NONE (<85 dBA)	PLUG O MUFF (85-108	AND	PLUG + MUFF + T) LIMIT (>118)			
Kitchen Refrigerator	t.	S		68.0- 69.2	*	~	x					
lotes: Range of levels leter Action: Enter F f						asure at ear level,		h.				
4. More Detailed No	NSE EVALUAT	TION REQUI	RED:			Yes	X No (if "	Yas " dentifu	type evaluatio	n needed)		
					1	- 1-07-5 - 1-						
13. NAME(S) OF	PERSON(S)	IDENTIFIED	FOR AUDI	OMETRIC	MONITOR	ING (Use additional	sheet if mo	re space is n	eeded and atta	ich to form)		
5. SUPERVISOR OF NO	(1. The Park !!	0.000								
Non-Respo	nsive		406-2	EPHONE (Include	area code)	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.	GANIZATION	RY, LIVINGSTON	, мт		
	5A	larne, Eirst,	MI)			18. HEARING CONV	ERSATION N	IONITOR (Las	t Name, First,	MI)		

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. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- 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.
- 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.

- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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 <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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:

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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. <u>Please notify your Safety and/or Occupational Health personnel of the</u> <u>completion of this cleaning regime and they will notify the proper officials of the</u> <u>sampling/testing requirements needed.</u>

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.

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Yes. Samples 110112-AFCR-LIV-01, 02, 03, 04, & 05
Are any weapons cleaned in the facility, if yes where are they cleaned?	Yes. The supply room.
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Yes. Samples 110112-AFCR-LIV-06, 07, 08, 09, & 10
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	Yes, Now a locker room.
Is there any peeling paint? Take bulk sample if able.	No
Are there any signs of water damage or mold ?	Yes. Water damage on ceiling tiles. New roof installed 2 years ago.
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	Asbestos Management Plan was not available on-site. Possible Asbestos in 12" floor tiles, mastic, and 2'x4' ceiling tiles.
Quality of housekeeping	Good
HVAC maintenance plan in place?	Yes
Overall condition of HVAC system	Good working condition
Obtained CO2, Temp, RH monitoring	Yes
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	Yes
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	All good condition.

Fire alarm in working conditionnot usually in place in older armories	No Fire Alarm. Smoke Detectors/CO ₂ alarms in main hall and workout room.
Fire extinguishers in place and properly identified and mounted	Yes
Evidence of monthly fire extinguisher inspections	Yes
Annual fire extinguisher inspections tags current	Yes
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	N/A
Egress routes accessible and properly markednoted on Fire Evacuation Plan	Yes. Posted in all rooms.
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	Yes.
Any Photo labs	No
Any hazardous noise sources	No
Light levels checked throughout building	Yes
Breaker panels properly labeled with no exposed wiring	Breaker panel boxes locked. No access available.
Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.?	 (1) full-time military personnel/ 0- civilian personnel Military Police Unit
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	No
Obtain two lead air samples	On IHSW Request Only

Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	No. Blocked off; not used.
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	None found
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	No Hazards
Name of Armory, POC, phone #, address and organizations in Armory (Add Checklist to Report)	Livingston Armory 24 Fleshman Creek Road Livingston MT 59047 Non-Responsive 143 th MP Detachment
	(406) 222-1381 (Add Checklist to Report)

	Intellicode	Q1	Q2	Q	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04	•			
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05	0			
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are recommended for control	953-01-07	•			
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07	0			
	953-01-08	•			
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not	953-01-08	>			
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are		c			
and the second se	953-01-09	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09	0			
Total number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	THI			
Tatal number of DOEHRS-IH shops coded as Priority 1	953-02-10	Ŧ			
Nomber of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	H			
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	Ŧ			
Number of buildings for which all processes requiring a basic industrial hygiene classification have received one within the last 12 months	953-02-12	IHT			
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	H			
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	HT		3	
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	IHT			
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	HT			
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	Ħ			
Number of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	IHT			

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	ß	Q2	Q	Q4 Annual
Number of personnel who required reassessment by industrial hygiene within the last 12 months.	953-02-15	3			
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	H			
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	H			
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	H I			
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	3			
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were in pected and measured for airflow rates	953-02-18	•			
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require impection and measurement of airflow rates	953-02-18	•			
Number of ventilation systems which require corrective action based on deficiencies	953-02-19	•			
Number of ventilation systems which were evaluated by an IH	953-02-19	0			
Number of design review packages evaluated and addressed by an IH with recommendations applicable to occupational health concerns	953-02-20	H			
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	Ħ			5

Livingston Armory Livingston, MT

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1651 of 1990



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Mexico • Nebraska

Industrial Hygiene Site Assistance Visit

Malta Armory 1008 US 191 Malta, MT 59538

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1491

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1652 of 1990 Industrial Hygiene Southwest's mission is to ensure all military personnel and military leadership is provided the specialized technical expertise, consultation and assistance to ensure all military operations and processes are conducted in a healthy manner



DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-IHSW

8 January 2013

MEMORANDUM THRU Montana Army National Guard, ATTN: NOT-Responsive Medical DET, Troop Medical Clinic Room 1009, 1956 MT Majo Street, Fort Harrison, MT 59636

FOR Commander, Malta Armory 1008 US 191, Malta, MT 59538

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Malta Armory, 1008 US 191, Malta, Montana conducted on 04 October 2012.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Malta Armory at 1008 US 191, Malta, MT on 04 OCT 2012.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

a. A building inspection of the armory, for asbestos, should be provided and a management plan in

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1654 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Malta Armory, 1008 US 191, Malta, Montana conducted on 04 October 2012.

place for personnel working at and on the facility should be written from that inspection. (para. 4.4) (RAC 3)

b. Record fire extinguishers inspections_which should be done monthly and annually with documentation on extinguisher. (para. 4.11) (RAC 4)

c. A current Chemical Inventory should be done and MSDS's acquired for these chemicals and placed in a centrally located binder for easy access. A HazCom program should be incorporated and annual training documented and kept in individuals personal records. (para. 4.7.1) (RAC 4)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

2. Corrective measures should be implemented and accomplished at the lowest levels possible. Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

 Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

 Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

 The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

 b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1655 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Malta Armory, 1008 US 191, Malta, Montana conducted on 04 October 2012.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

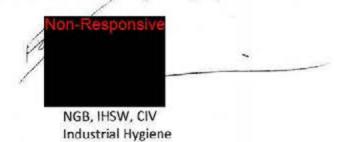
f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the Senior Unit Commander of this Facility and any Co-Tenant Organizations or Units, review and provide assistance with implementation of these recommendations. This will educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at



BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1656 of 1990

		а.
	e,	1
-	ð	1
	N N	H.H.H.

Industrial Hygiene, Southwest Hazard Inventory Log Malta Armory - MT 59538

And Contrigion And Contrigion And Contrigion But Addition But Addition Contrigion	112									
asteration on at the facility A Montana state-confiled asterity any area of the build be consulted to identify any area of the build be consulted to an flag of the survey at the should be kept contrant asbestos. A Montana state-confiled asbestos Armory 3 harmory 3 harmory at the should be kept contrant asbestos. Armory 3 facility if the facility does contrain asbestos. hermory then and Communicated to employees Armory 3 facility does contrain asbestos. hermory then and Communicated to employees Armory 4 harmory at the facility. hermory the and Communicated to employees Armory 4 harmory at the facility. hermory Addit foor. Armory 4 harmory at the facility. Addit foor. Armory 4 harmory target are in the transformed as the facility face and the mory if a reas. Armory Armory 4 more reflective color, or using task ighting in transformed area here and the face or and the areas. Armory 4 more reflective color, or using task ighting in transformed area here and the face or and the areas. here and the areas or and the areas. Armory 4 more reflective color, or using task ighting	ONTROL	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	SUSPENSE	ACTION	Estimated Cost(s)	DATE CORRECTED	REFERENCES
mination levels are ufficient in the classroom Armony 4 Increase illumination by increasing therumber or wattage of the light foctures, replace any burnt outbulls, painting the walls a brighter, more reflective color, or using task lighting in poorly lit areas. Armony and strate 4 Maintain colors, or using task lighting in poorly lit areas. at all MSDS's available in czmat storage area Armony 4 Maintain copies of all MSDS sheets in the poorly lit areas. Maintain copies of all MSDS sheets in the areas where hazardous chemicals are stored. E<	0 1X1	No asbestos documentation on file at the facility	Amory	6	A Montana state-certified asbestos inspector should be consulted to identify any area of the building that contains asbestos. Documentation should be kept on file of the survey at the facility. If the facility does contain asbestos, then an Operations & Maintenance Plan should be written and communicated to employees working at the facility.					29 CFR 1910,1001(b) & 29 CFR 1926,1101
Armory 4 Maintain copies of all MSDS sheets in the areas where hazardous chemicals are stored. Armory 4 Armory 4 Armory 4	A-100412-4.6	Illumination levels are insufficient in the classroom and drill floor.	Armory	4	Increase illumination by increasing thenumber or wattage of the light foctures, replace any burnt out butbs, painting the walls a brighter, more reflective color, or using task lighting in poorly lit areas.		42			ASHRAE, Standard 55-1192
Armony 4 monthly basis.	-100412-4.7.	I Not all MSDS's avaitable in Hazmat storage area	Armory	4	Maintain copies of all MSDS sheets in the areas where hazardous chemicals are stored.					00(b)(3)(i
	V-100412-4.11	No evidence of monthly fire extinguisher inspections	Armory	4	Document fire extinguisher inspections on a monthly basis.					29 CFR 1910.157(e)(3)

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1657 of 1990

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> <u>but check with local Environmental Office</u>.
- 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.
- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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:

 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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. <u>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.</u>

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.

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

MALTA ARMORY 1008 US HIGHWAY 191 SOUTH MALTA, MONTANA 59538

October 4, 2012

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1374.63

Prepared by:

UKE BUCKLIN

Luke Bucklin Industrial Hygiene Technician

Reviewed by:

David B. Durst, CIH, CSP, CAC, CPEA Principal-In-Charge

Table of Contents

1.0	INTRO	DDUCTION2
	1.1	IHSAV Objectives
	1.2	Scope of Work
2.0	PROC	ESS DESCRIPTION
3.0	METH	IODS
	3.1	Lead Wipe Sampling4
	3.2	Painted Surface Evaluation
	3.3	Water Damage and Limited Visual Fungal Growth Evaluation
	3.4	Asbestos Documentation
	3.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality 4
	3.6	Illumination Level Monitoring
	3.7	Hazardous Material Storage and Use Procedures
	3.8	Safety Training and Record Keeping
	3.9	Exhaust Ventilation Survey
	3.10	Sound-Level Measurements
	3.11	Safety Walk-Through
	3.12	Equipment Used7
	3.13	Quality Assurance
4.0	FINDI	NGS AND RECOMMENDATIONS
	4.1	Lead Wipe Sampling
	4.2	Painted Surface Evaluation
	4.3	Water Damage and Limited Visual Fungal Growth Evaluation
	4.4	Asbestos Documentation
	4.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality9
	4.6	Illumination Level Monitoring
	4.7	Hazardous Material Storage and Use Procedures
		4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets
		(MSDS)10
		4.7.2 Flammable Storage Cabinets
		4.7.3 Flammable and POL Storage
	4.8	Safety Training and Record Keeping10
	4.9	Ventilation Survey10
	4.10	Sound-Level Measurements
	4.11	Safety Walk-Through
5.0	PROJ	ECT LIMITATIONS
6.0	PROJ	ECT APPROVAL

Appendices

Appendix A	References
Appendix B	Assessment Criteria
Appendix C	Photo Log
Appendix D	Chemical Inventory
Appendix E	Floor Plan /IAQ - Temp, RH, & CO2 Monitoring
Appendix F	Ventilation Data
Appendix G	Field Notes
Appendix H	Calibration Certificates
Appendix I	Air Sampling & Metal/Lead Wipe Tables
Appendix J	Laboratory Reports
Appendix K	Employee List
Appendix L	IHSW Violation Inventory Log
Appendix M	Hazard Assessments
Appendix N	Recommendations
Appendix O	DD Forms 2214
Appendix P	IHSW Lead-Cleanup SOP
Appendix Q	Facility Information Worksheet
Appendix R	Installation Status Report (ISR)

iii

EXECUTIVE SUMMARY

On October 4, 2012. Non-Responsive Industrial Hygiene Field Technician of NES, Inc. (NES) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Malta Armory located at 1008 US Highway 191 South, in Malta Montana. The primary point of contact for information gathered during this survey was Jason Ness, phone: (406) 324-5540, email:

The objectives of this IHSAV were to perform the following activities:

- · Evaluate configuration of battery storage and charging facilities;
- · Review hazardous material storage and use procedures;
- Review the Respiratory Protection Program and respirator use/storage;
- Collect area and breathing zone air samples;
- · Collect metal surface wipe samples;
- · Measure the volumetric flow of local exhaust ventilation systems;
- Monitor employee noise exposures through noise dosimetry and source measurements;
- Measure illumination levels;
- · Collect indoor air quality data;
- · Evaluate any existing safety hazards; and,
- · Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: Jason Ness went above and beyond expectations to help NES complete the IHSAV.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1665 of 1990

1.0 INTRODUCTION

During October 4, 2012 Non-Responsive Industrial Hygiene Field Technician of NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Malta Armory located at 1008 US Highway 191 South, in Malta Montana. The primary point of contact for information gathered during this survey was Non-Responsive phone: (406) 324-5540, email:

1.1 IHSAV Objectives

The objectives of the IHSAV are to evaluate the occupational environment of the administrative areas in the Armory, to determine the presence of operational health and safety risks, and to make recommendations for corrective actions or follow-up work to assist the Army National Guard in managing those risks.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- · Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the armory for water damage and the presence of fungal growth;
- Review asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the condition of the Heating, Ventilation, and Air-Conditioning system and collect indoor air quality data;
- · Review hazardous material storage and use procedures;
- · Review safety training, and record keeping;
- · Perform a ventilation survey on the kitchen stove hood (if present);
- · Perform a noise survey on the kitchen appliances; and,
- · Conduct a safety walk-through evaluation and note any existing safety hazards.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1666 of 1990

2.0 PROCESS DESCRIPTION

The Malta Armory has one part-time Army National Guard member. The Armory has offices used for administrative purposes. The Malta Armory contains a drill floor, storage rooms, a converted indoor firing range and a supply shed. The Armory has a kitchen which was condemned and is no longer in use. There are no civilian employees at this Armory. Civilian functions are carried out in this Armory approximately twice a year for blood drives. The drill floor is occasionally used by Army National Guard members as a staging area but no weapons are cleaned at the facility.

Page 3 of 13

NES, Inc. NES Job Number: 013.1H1374.63

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1667 of 1990

3.0 METHODS

3.1 Lead Wipe Sampling

Metals wipe samples were collected on horizontal work and floor surfaces in various locations throughout the facility. Ghost Wipe[™] brand wipes were used by wiping a one square foot template. The collected wipe samples were placed in clean and labeled centrifuge tubes. Samples were submitted to ALS Environmental Laboratories located in Salt Lake City, Utah for analysis, using NIOSH Method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust. See Appendix E for a drawing of sample locations. See Appendix I, table 1 for lead wipe sampling analytical results. See Appendix J for laboratory reports.

3.2 Painted Surface Evaluation

The interior and exterior of the building was visually inspected for peeling paint on the wall and ceilings. Paint chip samples were not collected from the building as there was no peeling paint observed during this IHSAV.

3.3 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the Armory was visually inspected for water damage and subsequent fungal growth resulting from moisture. Any water impacted areas noted were documented on a drawing for a follow-up evaluation.

3.4 Asbestos Documentation

An evaluation asbestos documentation was performed. This evaluation consisted of determining if an asbestos survey and assessment have been done.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation, and air-conditioning systems that serve the facility was accomplished. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system was performed to note any obvious operational problems. Carbon dioxide (CO₂), temperature, relative humidity and Carbon monoxide (CO) were measured using a TSI Q-Trak[™] IAQ Monitor model 8551. The unit was calibrated before use with certified zero gas and 1,000-ppm CO2 span gas. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. Human occupants produce CO2, water vapor, and other bio effluents. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, Ventilation for Acceptable Air Quality, recommend maintaining CO2 below a concentration that is 700 parts per million (700 ppm) above outdoor levels. Outside CO2 concentrations are typically about 350 ppm. Providing sufficient ventilation to maintain steady-state CO₂ concentrations at this level will assure that a substantial majority of people entering a space will be satisfied with respect to human bio effluents (body odors). ASHRAE also recommends an outside air supply rate of 20 cubic feet per minute (20 cfm) per building occupant in office spaces, and, at that ventilation rate, CO₂ concentrations should not increase over time. Outside air supply rates were not measured during this IHSAV since CO2 concentrations were within an acceptable range. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the Armory. The instrument used for the illumination survey was a Konica Minolta light meter, Model TL1. Measurements taken were obtained at typical working locations such as desks, computers, drill floor, classroom and general working areas. See Appendix E for illumination data.

3.7 Hazardous Material Storage and Use Procedures

A review of the Armory's chemical inventory and material safety data sheet (MSDS) file was accomplished. Chemical storage areas, i.e., flammable storage cabinets/rooms were also inspected as part of this IH Site Assistance Visit.

3.8 Safety Training and Record Keeping

An inspection of the Armory's training programs and training documentation was performed to determine if the site specific training programs and annual documentation is current.

Page 5 of 13

3.9 Exhaust Ventilation Survey

No air velocity or flow measurements were measured on the kitchen hood because there was no kitchen located at the Armory.

3.10 Sound-Level Measurements

No sound level measurements were taken at the Malta Armory because no high noise areas were identified during the visit.

3.11 Safety Walk-Through

A safety walk-though evaluation of the Armory was performed to document the presence of a fire alarm, to determine if fire extinguishers are properly mounted and are current on their monthly and annual inspections, ground fault circuit interrupter (GFCI) measurements and inspection, if eyewash stations inspections are current, and to document any fire or safety hazards in the Armory.

3.12 Equipment Used

Туре	Model Number	Serial Number	Calibration Date
TSI VelociCalc [™] Plus Meter	8386A	54110581	June 2012
TSI IAQ-Calc [™] Meter	8551	81380	Jan. 2012
Konica Minolta Light Meter	TL1	002579029	May 2012

The following equipment was used for this survey.

Please see Appendix H for a complete inventory of calibration certificates that may have been used during this IHSAV.

3.13 Quality Assurance

NES, employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- · Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and,
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Wipe Sampling

Wipe samples for lead dust, were collected from horizontal surfaces in selected representative areas of the Malta Armory to determine if housekeeping efforts are successful. The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot (μ g/ft²) as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 µg/ft² is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

A total of 7 Ghost Wipe[™] lead samples were taken during the time of the IHSAV. The first five samples were collected from the drill floor surface areas. The drill floor (southwest corner); the drill floor (northwest corner); the (middle) of the drill floor; the drill floor (southeast corner); and the drill floor (northeast corner) is where the samples were collected.

Additional lead wipe sampling was taken from approximately 25% of the rest of the building. The 2 additional areas that were sampled were collected from the following areas: the exercise area and the locker room which is a converted indoor firing range.

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard
10412-Malta-01	Drill Floor	Northeast corner of drill floor, floor area sample	< 2.5	< 40 µg/ft ²
10412-Malta-02	Drill Floor	Southeast corner of drill floor, floor area sample	< 2.5	$< 40 \ \mu g/ft^2$
10412-Malta-03	Drill Floor	Center, middle of drill floor, floor area sample	< 2.5	< 40 µg/ft ²
10412-Malta-04	Drill Floor	Northwest corner of drill floor, floor area sample	< 2.5	< 40 µg/ft ²
10412-Malta-05	Drill Floor	Southwest corner of drill floor, floor area sample	7.2	< 40 µg/ft ²
10412-Malta-06	Gym/converted IFR	Center of room	14	< 40 µg/ft ²
10412-Malta-07	Locker room/converted IFR	Center of room	< 2.5	< 40 µg/ft ²
10412-Malta-06	1.0 W 60 6500 870			-

The analytical results for each of the aforementioned areas were below the 40 μ g/ft² criterion. The analytical results are provided in the table below.

IHSAV Malta Armory Malta, Montana Page 8 of 13

NES, Inc. NES Job Number: 013.IH1374.63

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1672 of 1990 See Table 1 in Appendix I for a table of results. The laboratory reports are supplied in Appendix J.

4.2 Painted Surface Evaluation

No peeling paint was observed in the interior or the exterior of the building during the site visit; therefore no bulk samples were taken. Paint was in overall good condition during the IHSAV.

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

During the inspection of the facility there were no water damaged areas observed.

4.4 Asbestos Documentation

No asbestos documentation was present during the time of the IHSAV.

4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

The HVAC systems were all functioning and up to date on maintenance and inspections during the time of the IHSAV.

The average outdoor carbon dioxide concentration at the time of the survey was approximately 375 ppm; therefore, the maximum indoor CO_2 level recommended by the ASHRAE Standard would be 1,075 ppm. Carbon dioxide concentrations throughout the facility were lower than 1,075 ppm; the highest CO_2 concentration measured was 670 ppm in the main office.

Building air temperatures ranged from 65°F to 66°F and relative humidity was between 39% and 50% during the testing period. ASHRAE recommends maintaining temperatures between 68 and 75°F. Relative humidity should be maintained between 30% and 60% to minimize the growth of allergenic or pathogenic organisms.

4.6 Illumination Level Monitoring

Illumination levels were measured throughout the facility. The numbers represent the illumination level in foot-candles (FC). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or workbench were taken at waist level.

The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP71991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 FC is the minimum lighting requirements for the performance of tasks where reading is required, 30 FC is required for work areas where reading is not required, 10 FC is required for non-work areas, such as aisles and corridors, and 5 FC is required for walking surfaces, such as mechanical spaces.

Based on the above criterion, the lighting in the classroom as well as the western and center portions of the Drill Floor were inadequate to meet the 50 FC criteria. See Appendix E for data table.

4.7 Hazardous Material Storage and Use Procedures

4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS)

Inventories of all hazardous materials used by the Armory along with their associated Material Safety Data Sheets (MSDSs) are maintained in a master binder. It is also recommended that inventories and MSDSs be maintained in separate binders, one for each satellite storage location (i.e. flammable storage room or cabinet). Copies of chemical inventories are provided in Appendix D.

4.7.2 Flammable Storage Cabinets

There is one HAZMAT storage locker and one flammable storage locker located at the Armory. The flammable storage locker was located in the interior of the building in a well-ventilated area. This flammable locker was inspected and no storage incompatibilities or leaking materials were found. The lockers were in good condition and all doors were noted to close properly.

4.7.3 Flammable and POL Storage

Not applicable to the facility as stated by Jason Ness.

4.8 Safety Training and Record Keeping

The following training documentation was found at the site:

- Hazcom Training

4.9 Ventilation Survey

There is no kitchen stove hood located at the Malta Armory; therefore a ventilation survey was not conducted.

IHSAV Malta Armory Malta, Montana Posted to NGB FOIA Reading Room May, 2018 Page 10 of 13

NES, Inc. NES Job Number: 013.IH1374.63

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1674 of 1990

4.10 Sound-Level Measurements

Sound level measurements were not taken at the Malta Armory because no high noise or hazardous noise areas were observed.

4.11 Safety Walk-Through

- 1. Housekeeping throughout the facility was good.
- Fire extinguishers are strategically located throughout the shop. All extinguishers were up to date for annual inspections as of October 2012. However, there wasn't evidence of monthly inspections of fire extinguishers. A log of monthly fire extinguisher inspections should be documented on the fire extinguishers.
- Fire evacuation plan is documented, visual throughout the building and seems to be communicated to all personnel. Egress routes are marked of the fire evacuation plan.
- The ground fault circuit interrupter (GFCI) outlets that were tested were functioned properly.

May, 2018

Posted to NGB FOIA Reading Room

5.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, Company professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. Company assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of Company, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since Company is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

May, 2018

NES, Inc. NES Job Number: 013.IH1374.63

6.0 PROJECT APPROVAL This IHSAV was reviewed and approved by:



November 29, 2012 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact Non-Responsive 16-353-2360, or Non-Responsive of the Southwest Regional Industrial Hygiene Office, 916-804-1707. Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

May, 2018

NES, Inc. NES Job Number: 013.1H1374.63

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1677 of 1990

APPENDIX A

REFERENCES

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process

AR 385-10, The Army Safety Program

Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

- TB MED 503, The Army Industrial Hygiene Program
- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

APPENDIX B

ASSESSMENT CRITERIA

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Occupational Exposure Limit

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).

PHOTO LOG Malta Armory Malta, Montana October 04, 2012



Photo 1: Malta Armory located in Malta, Montana.

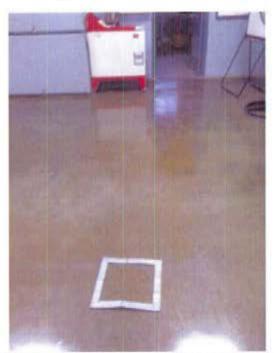


Photo 2: Lead sample 10412-Malta-01 from Drill Floor, northeast corner.

PHOTO LOG Malta Armory Malta, Montana October 04, 2012

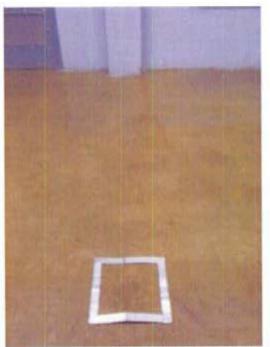


Photo 3: Lead sample 10412-Malta-02 from Drill Floor, southeast corner.



Photo 4: Lead sample 10412-Malta-03 from Drill Floor, center of floor area.

PHOTO LOG Malta Armory Malta, Montana October 04, 2012



Photo 5: Lead sample 10412-Malta-04 from Drill Floor, northwest corner.



Photo 6: Lead sample 10412-Malta-05 from Drill Floor, southwest corner.

Posted to NGB FOIA Reading Room May, 2018

PHOTO LOG Malta Armory Malta, Montana October 04, 2012



Photo 7: Lead sample 10412-Malta-06 from gym area floor in the Converted IFR.



Photo 8: Lead sample 10412-Malta-07 from locker room floor in the Converted IFR.

÷

BEST AVAILABLE COPY terials Inventory Database: Print Inve y

Print Inventory

Print Inventory Cancel

Unit: 484th MP Storage: Boiler Room Cleaning Month: (-) Shelf 1/1/2010

SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
B01 Pepco 418		, LP	Peck Products Co.		1	Carton	4	N1
. B02 Vani-Sol Bowl Cleanse; ED-212		7930-00-234-1945	Sterling Drug Inc.	BDLHV	6	qt	4	C1
C01	Dishwashing Compound	7930-00-880-4454	LHB	BNTLZ	1	Gal	6	N1
C01 Power Time		7930-01-436-8045	Rochester Midland	CFDNN	2	Gal	4	N1
C02	TJ-00501 Tuff Job	7930-01-336-7197	Cooke Industries Inc.	BPYNG	1	Gal	6	B3
C03	Star Glass Cleaner RTU	7930-00-184-9423	Space Chemical Inc.	BXNWV	3	Gal	7	V4
D01	A-125 Dry	6840-01-313-1901	Airkem (div of Ecolab)	CDJTG	2	3 gal	0	B3
D02	A-33 Dry	6840-00-238-9225	Airkem Professional (Div of Ecolab Inc)	BHYHL	- 3	Can	4	T 4
D03	Wall Cleaner	IJ	DAP		1	Gal	4	
D04	Descaler/Delimer	P	Daimond Products		1	Gal	4	

Posted to NGB FOIA Reading Room May, 2018

A COMPANY AND COMPANY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1685 of 1990

Print Inventory

Print Inventory Cancel

Unit: 484th MP (-) Storage: Drill Floor FL 01 Month: 1/1/2010

SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
	CLP	9150-01-054-6453	ROYAL LUBRICANTS		6	PT		
	ENAMEL BROWN	8010-00-348-7715	LHB		12	CN	Å	
	ENAMEL FLAT BLACK	8010-01-331-6108	LHB		6	CN		
	ENAMEL OLIVE DRAB	8010-01-331-6113	LHB		5	CN		11
	GLASS CLEANER	7930-01-326-8110	LHB		3	РТ		
	ISOPROPYL ALCOHOL	6810-01-382-2904	TELECHEM INTERNATIONAL		1	BX	0	E2
	TENT PATCH	8040-00-264-3848	CLIFTON ADHESIVE INC.	ВКНКҮ	1	CN		F2
A04	Brushing Lacquer	8010-00-085-0559	Eastman Kodak Co.	BJJNF	1	Bottle	0	F2
A05	So-Sure Corrosion Preventive Compound	8030-00-938-1947	LHB Inc.	BTSXS	5	Can	6	V2
A06	Nortech Adhesive 2289	8040-00-543-7170	Nortech Adhesive Corp	BLJVP	2	Can	4	F3
A08	Foam Fast 74 Spray Adhesive	8040-00-181-7761	3M Company	BDGMP	1	Can	4	V3
A11	5227; High Performance Acrylic Coating-National Blue	8010-00-D00-4816	Rust-Oleum	BYSNJ	1	Can	0	N1

Montana ARNG Hazardous Materials In Bestoay Alables CopPrint Inventory

Page 2 of 2

B01	Paint Latex Green	UP	Hardware Hank		1	qt	4	N1
B02	Paint Latex Tan	UP	Our Own Hardware		1	qt	4	N1
803	Kingsford Odorless Charcoal Lighter	9110-00-N01-7391	Clorox Co.	CFNNX	1	qt	6	F4
B07	Heet Gas-Line Antifreeze and water remover	LP	Good Eagle Co.		1	Bottle	м	F4
B08	Braycote 646	9150-00-687-4241	Bray Oll Co. for Castrol Inc.	CJPGM	1	Qt	6	vs
B10	Siloo Battery Terminal Protector	6850-00-N04-5243	CRC Ind. Inc.	BTPQX	1	Can	0	V3
B13	20606/206007; Government Insecticide	6840-01-412-4634	Airosol Co. Inc.	BYHDD	28	Can	o	V2
B15	Royco 22MS; Lubricating Grease	9150-00-181-7724	Anderol Inc. BJLDJ		1	Tube	6	V6
B17	Starting Fluid	LP	RADIATOR SPECIALTY		1	Can	0	V3
B18	WD-40 Aerosol	8030-01-439-0681	WD-40 Co.	CFVZS	5	can	0	V3
C01	Super Pinnacle XL Finish	LP	Montana Broom and Brush Co.		3	Gal		
C04	Final or Erase Rat & Mouse Balt	6840-00-753-4973	Bell Laboratories Inc.	BFNFY	1	Can	4	тs
C06	2 Cycle Engine Oil	LP	Lawn-Boy Inc		1	Pint	м	F4

Montana ARNG Hazardous Materials InBESTORYAIDABLE 3SOP Print Inventory

2

Page 1 of 1

Print Inventory

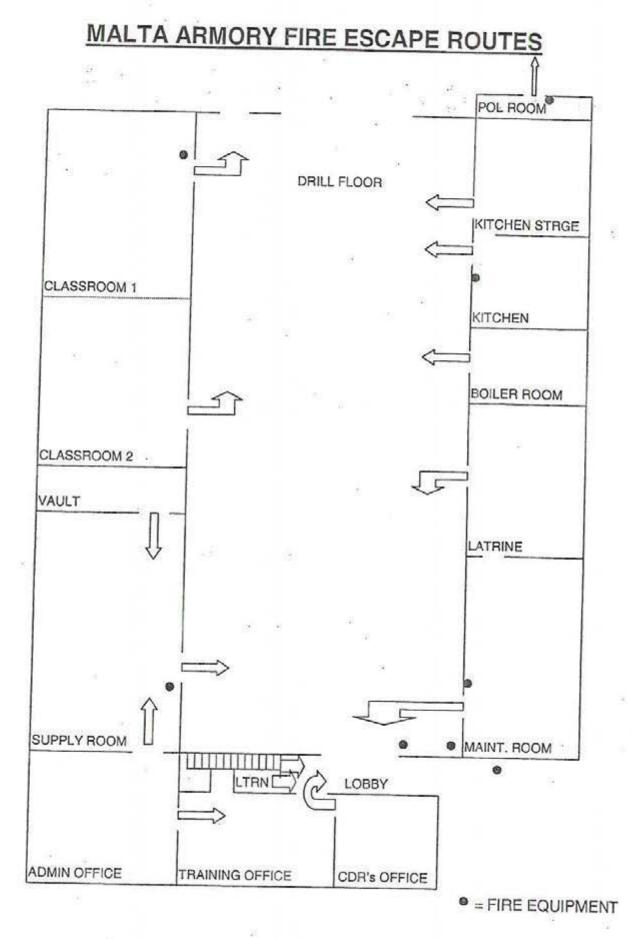
Print Inventory Cancel

2

Unit: 484th MP (-) Storage: DRILL FLOOR FL02 Month: 1/1/2010

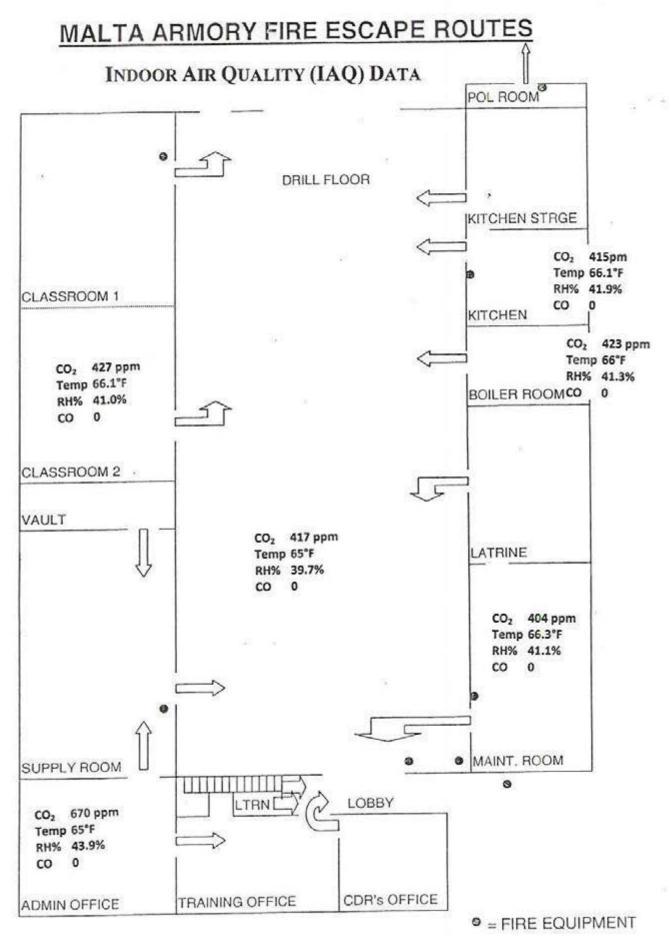
SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
	ARMOR ALL CLEANER	FL02-07	M-KESSEN	BBNMW	2	QT		N1
1	SEALING COMPOUND	8030-01-103-2868	HOME OIL CO.	CPXNR	4	PT		V5
A01	Sunbonnet Lemon Wax	7930-00-N04-6699	The Butcher Co.	BSHGM	8	Can	4	F3
A02	Good Sense	7930-00-N05-8443	S C Johnson Wax	BXCZX	14	Can	4	N1
A04	Foam Plus	8135-00-N02-1515	Insta Foam Products	СВВНМ	1	Can	O	V3
A06	Turpentine	8010-00-F03-6166	Klean-Strip div Barr W M & Co.	BTVJY	1	qt	4	F2
A08	Paint Latex Yellow	ĽP	Hardware Hank		2	Gal	4	N1
B03	Plastic Polish Liquid PP560B	7930-00-935-3794	Ralrube Inc.	BWDZN	26	qt	6	F4
B05	Paint Latex Blue	8010-00-B22-0015	Valspar Corp	BKLXP	1	Gal	4	N1
B06	Paint Oil Base Grey	P	Columbia		3	Gal	4	F3
C04	Tollet Soap	8250-00-228-0598	LHB	CFMYL	4	Gal	6	N1

hPostenging BFOIA Reading 80070/mt_env_hmi/HMI/printInventory.asp?sforA Requested Recold 40:15-00851(MP)010 May, 2018 Released by National Guard Bureau Page 1688 of 1990



4

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1689 of 1990



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1690 of 1990

25

ILLUMINANCE SURVEY Malta Armory Malta, Montana October 4, 2012

Building	Location	Light - FC*
Armory	Training Room at desktop	82.7
Armory	Supply Room at desktop	64.9
Armory	Drill Floor, east	37.5
Armory	Drill Floor, center	33.4
Armory	Drill Floor, west	56.0
Armory	Maintenance/Storage Room	18.7
Armory	Classroom	32.8
Armory	Converted IFR/Locker Room	36.7
Armory	Lobby	26.2

*FC= foot candle measurement

BEST AVAILABLE COPY Matta - Armon . C.3 10/4/12 Lead Will Sample locations Sample # 10412-Malta - 01 scatin Dral Floor, NE -02 \$ - 03 -04 -05 -06 FK -07

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1692 of 1990

Name: LUKE BUCKUIN

Date: 10/4/2012

NES Job Number: 013,141374,63

Light Survey

Building	Location	Light - ft/c
Armory	Praining Koom	82.7 Alc
1	Supply Room Qu Desk	64.9 FH/C
	Drill Floor (E)	37.5 ft/c
	Drill Floor (Center	33,4 ft/L
	Prill Floor (w)	56.0 ft/c
	maintenance/storon	18.7 ft/c
	Classroom	32, 8 ft/
	Bother known	31.0 ft/c
	Converted IFR/ Locius room	36.7 Ft/
\checkmark	Lobry	24.2 ft/c

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1693 of 1990 ŕ

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	01-05
Are any weapons cleaned in the facility, if yes where are they cleaned?	NO.
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	06-07 IFR
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	Yes, Now locker room, Storage
Is there any peeling paint? Take bulk sample if able.	NO
Are there any signs of water damage or mold?	NO
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	NO
Quality of housekeeping	Gwod.
HVAC maintenance plan in place?	State.
Overall condition of HVAC system	Grood
Obtained CO2, Temp, RH monitoring	V Affaiched
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	V Affactud V uplate inventory
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	J

22

Fire alarm in working conditionnot usually in place in older armories	- No
Fire extinguishers in place and properly identified and mounted	J
Evidence of monthly fire extinguisher inspections	NO (021)
Annual fire extinguisher inspections tags current	Feb 2017 - Due -
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	NIA
Egress routes accessible and properly markednoted on Fire Evacuation Plan	1
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	Hazzan J
Any Photo labs	NIA
Any hazardous noise sources	NIA
Light levels checked throughout building	V Attached
Breaker panels properly labeled with no exposed wiring	
Check building occupancy 1. How many military personnel, how many civilian personnel 2. William for its personnel	(i) Part trune - Non-Responsive
2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.?	OMP Company.
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	Olbosionally, 2 trues a Year- Commonity Blood drive - end op April
Obtain two lead air samples	On IHSW Request Only

anin

	2010
Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	N/1A-Memo-kitchen Condened
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	NIA
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	_
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	
Name of Armory, POC, phone #, address and organizations in Armory	Annow HC72 malta 466-724-5540 1008 VS 191
(Add Checklist to Report)	(Add Checklist to Report)

= MSDS inventory / unsps - Five Extinguishus

3M Occupational Health and **Environmental Safety Division**

.

BEST AVAILABLE COPY Quest Technologies 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questtechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax



Page 1 of 2

.

Certificate of Calibration

Certificate No: 1095258 CDF020012

Date Received:

Model Conditions:

Date Issued:

Valid Until:

As Found:

As Left:

Submitted By:		IHSW-NGB				
	10	10510	SUPERFORTRESS	AVE.		

MATHER, CA 95655

Serial Number: CDF020012

Customer ID:

Model:

2900 SLM

Test Conditions:

Temperature:	18°C to 29°C				
Humidity:	20% to 80%				
Parameter Provident	000 1000				

Barometric Pressure: 890 mbar to 1050 mbar

SubAssemblies: De

escription:					Serial Number:
MICROPHONE QE	7052	1/2	IN.	ELECTRET	25923
TYPE 2 PREAMP					N/A

.ibration Procedure: 56V996

Reference Standard(s):

I.D. Number	Device
ET0000453	FLUKE 45 MULTIMETER
ET0000556	B&K ENSEMBLE
	and a damage

Last Calibration Date Calibration Due 3/2/2011 3/2/2013 4/27/2011 4/27/2012

3/28/2012

3/29/2012

3/29/2013

IN TOLERANCE

IN TOLERANCE

Measurement Uncertainty:

+/- 2.2% ACOUSTIC (0.19DB)+/- 1.4% VAC +/- 0.1% VDC Estimated at 95% Confidence Level (k=2)

Calibrated By:

Reviewed/Approved By:

n-Responsiv 8/29/2012 /29/2012

This report certifies that all calibration equipment used in the test is traceable to NIST or other NMI, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of Quest Technologies.

098-393 Rev. B

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1697 of 1990

3M Occupational Health and Environmental Safety Division



BEST AVAILABLE COPY Quest Technologies 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questtechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax



Page 2 of 2

1

Certificate of Calibration

Certificate No: 1095258 CDF020012

(A) indicates out of tolerance condition

Test Type	Nominal	Tolerance-	Tolerance+	As Found	As Left	Unit
Calibration	110.0	109.5	110.5	110.1	110.0	dB
A Weighting/125Hz	93.9	92.4	95.4	94.4	94.3	dB
A Weighting/250Hz	101.4	99.9	102.9	101.8	101.7	dB
A Weighting/500Hz	106.8	105.3	108.3	107.0	106.9	dB
A Weighting/1kHz	110.0	109.5	110.5	110.1	110.0	dB
A Weighting/2kHz	111.2	109.2	113.2	111.5	111.4	dB
C Weighting/125Hz	109.8	108.3	111.3	110.6	110.5	dB
C Weighting/250Hz	110.0	108.5	111.5	110.7	110.5	dB
C Weighting/500Hz	110.0	108.5	111.5	110.5	110.3	dB
C Weighting/lkHz	110.0	109.5	110.5	110.2	110.1	dB
C Weighting/2kHz	109.8	107.8	111.8	110.2	110.1	dB
Lin Weighting/125Hz	110.0	108.5	111.5	110.8	110.7	dB
Lin Weighting/250Hz	110.0	108.5	111.5	110.7	110.6	dB
Lin Weighting/500Hz	110.0	108.5	111.5	110.5	110.4	dB
Lin Weighting/1kHz	110.0	109.5	110.5	110.2	110.1	dB
Lin Weighting/2kHz	110.0	108.0	112.0	110.4	110.3	dB
Lin/60 - 120/120	120.0	118.8	121.2	120.6	120.5	dB
Lin/60 - 120/110	110.0	109.5	110.5	110.1	110.0	dB
Lin/60 - 120/100	100.0	98.8	101.2	99.9	99.8	dB
Lin/60 - 120/90	90.0	88.8	91.2	90.0	89.9	dB
Lin/40 - 100/90	90.0	88.8	91.2	89.8	89.8	dB
Lin/40 - 100/80	80.0	78.8	81.2	79.9	79.8	dB
Peak/60 - 120/120	123.0	121.5	124.5	122.2	122.0	dB
Peak/60 - 120/110	113.0	111.5	114.5	113.1	112.9	dB
Peak/60 - 120/100	103.0	101.5	104.5	103.0	102.8	dB
Peak/60 - 120/90	93.0	91.5	94.5	93.1	93.0	dB
DC Out/120dB	1.000	0.950	1.050	1.008	1.005	VDC
AC Out/120dB	3.160	2.920	3.430	3.252	3.196	VAC

* indicates non accredited

098-393 Rev. B

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1698 of 1990

An ISO 9001 Registered Company

ISO 17025 Accredited Calibration Laboratory



RMA Number: 800235189

Ship-to party 5180406	Sold-to party 5180406
IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA	IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

Service Information: Purchase Order Purchase Order Date

CC.Non-Response 03/26/2012

Description Calibration of VelociCalc Plus 8386A

Equipment 57602 VELOCICALC Plus Air Velocity Meter Serial Number 54110581 Material 8386A

Service Description:

Return Reason: CALIBRATION OVERDUE

Findings:

Unit sent in for clean and calibration. The unit passed as found.

Action:

The unit was cleaned, calibrated, and a complete operational checkout

was performed.

CERTIFICATE OF CALIBRATION AND TESTING TS1 Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

EN	VIRONMENT C	CONDITION		145 M 100		Me	DDEL.		8386A	
TE	TEMPERATURE 68.4 (20.2) *P (*C)					IVIC	men.		0300A	
RE	ATTVE HUMION	ΓY	36	%RH						
BA	ROMETRIC PRES	SURE	28.61 (968.8)	inHg (hPa)		SEI	наі. Numbi	R	54110581	
-	AS LEFT			5	N TI	11 120	ANCE		The second second second	
	AS FOUND						OLERANCE			
		- C A L	IBRATI	ON VE	RI	FI	CATION	RESULT	· s	
VF	LOCITY VER	IFICATION		10.	SI	STE	M V-106		Unit: ft/min (m/s	
#	STANDARD	MEASURED	ALLOWABL.	ALLOWABLE RANGE		ST/	ANDARD	MEASURED	ALLOWABLE RANGE	
1	0 (0.00)	0(0.00)	-3-3 (-0.0	-3-3 (-0.02-0.02)		64	3 (3.26)	640 (3.25)	623-662 (3.17-3.36)	
2	34 (0.17)	35(0.18)	31~37 (0.1	31-37 (0.16-0.19)		99	5 (5.06)	991 (5.03)	965~1025 (4.90~5.21)	
3	64 (0.32)	64 (0.32)	61-67 (0.3	61-67 (0.31-0.34)		14(58 (7.45)	1476 (7.50)	1423-1512 (723-7.68)	
4	99 (0.50)	99 (0.50)	96-102 (0.49-0.52)		10	248	1 (12.60)	2463 (12.51)	2406~2555 (12 22~12.98)	
5	160 (0.81)	159 (0.81)	155~164 (0.	155-164 (0.79-0.84)		450	1 (22.87)	4440 (22.55)	4366-4636 (22.18-23.55)	
6	328 (1.67)	325 (1.65)	318-338 (1.	318-338 (1.62-1.72)		800	0 (40,64)	7943 (40.35)	7760~8240 (39.42~41.86)	
TE	MPERATURE	VERIFICATION			SI	STE	M T-119		Unit: °F (°C	
#	STANDARD	MEASURED	ALLOWAR	ILE RANGE	#	STANDARD		MEASURED	ALLOWABLE RANGE	
1	32.0 (0.0)	32.1 (0.1)	31.5~32.5	(-0.3~0.3)	2	14	0.0 (60.0)	139.8 (59.9)	139.5~140.5 (59.7-60.3)	
PR	ESSURE VERI	FICATION			S	STE	M V-106		Unit: inH ₂ O (Pa	
#	STANDARD	MEASURED	ALLOV	WABLE RANG	ЯК.	#	STANDARD	MEASURED	A LLOWABLE RANGE	
1	-4.073 (-1014.2)	-4.084 (-1016.9)		19~-4.027 (5.6~-1002.8))	3	8.027 (1998.7	8.074 (2010.4)	7.942~8.112 (1977.5~2020.0	
z	2.032 (506.0)	2.041 (508.2)	2.007~2.0	057 (499.7~51	2.3)	4	14.052 (3498.9)	14.114 (3514.4)	13.906-14.198 (3462.7-3535.2)	
HI	MIDITY AS	FOUND			SI	STE	M H-102		Unit: %RI	
#	STANDARD	MEASURED	ALLOW	ABLE RANGE	6	#	STANDARD	MEASURED	ALLOWABLE RANGE	
1	10.0	11.8	7.	0~13.0		4	70,0	69.1	67.0~73.0	
2	30.0	30.6	27	.0~33.0		5	90.0	89.4	87.0~93.0	
3	50.0	49.9	47	.0~53.0				1.000		

data) and has been collibrated using standards whose occuracies are inaceable to the United States Notional Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable to NIST, or is derived from accepted values of physical constants, TSF's collibration system is registered to ISO-9001:2008 and meets the requirements of ISO 10012:2003.

Measurement Variable	System ID	Last Cal.	Cal. Due	Measurement Variable	System ID	Last Cal.	Cal. Due
DC Voltage	E004477	12-13-11	12-15-12	Temperature	E001644	01-20-12	07-20-12
Pressure	E001558	12-12-11	06-12-12	Pressure	E001560	12-12-11	06-12-12
Velocity	E003327	09-19-07	09-19-12	Barometric Pressure	E001992	04-08-11	04-08-12
Temperature	E001800	01-19-12	07-19-12	Temperature	E001799	01-19-12	07-19-12
Humidity	E003539	02-28-12	08-28-12				

Doe ID CERT_DEFAULT

lesbon

March 27, 2012 DATE

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1700 of 1990

Í	S,	CER	TSI Inc	orporated, 5	00 Car	diga	n Road, Shor	review	N AND , MN 55126 U 24 http://www	TESTING USA v.tsi.com
EN	VIRONMENT C	ONDITION								00004
EN	MPERATURE		69.1 (20.6)	*F(*C)	-	M	ODEL			8386A
E	LATIVE HUMIDIT	Y	37	%RH	_		1			
BA	ROMETRIC PRES	SURE	28.61 (968.8)	inHg (hPa)		SE	RIAL NUMI	BER		54110581
	AS LEFT	6	IBRAT			orT	OLERANCE			
_			IBRAI	IUN Y		1		N 1	CESULI	and the second se
-		VERIFICATION			-		EM T-119			Unit: °F (°C
#	STANDARD 32.0 (0.0)	MEASURED 32.1 (0.1)		ALLOWABLE RANGE # STANDARD MEASURED 31.5-32.5 (-0.3-0.3) 2 140.0 (60.0) 139.8 (59.9)					ALLOWABLE RANGE 139.5-140.5 (59.7-60.3)	
- 1	LESSURE VERI			Care ship	1.5	-	EM V-106			Unit: inH,O (Pa
	STANDARD	MEASURED	A110	WABLE RANG		le.	STANDAR	n	MEASURED	ALLOWABLE RANGE
Ī	-4.073 (-1014.2)	-4.084	-4.	119~-4.027		3	8.027 (1998		.074 (2010.4)	7.9428.112 (1977.5-2020.0
2	2 032 (506.0)	2.041 (508.2)		057 (499.7~5	and the second	4	14.052 (3498.9)	T	14,114 (3514.4)	13.906~14.198 (3462.7~3535.2)
HI	UMIDITY VERI	FICATION			S	vsn	EM H-102			Unit: %RI
Ħ	STANDARD	MEASURED	ALLOW	ABLE RANG	E	#	STANDARD		MEASURED	ALLOWABLE RANGE
ī	10.0	11.8		0~13.0		4	70.0		69.1	67.0~73.0
2	30.0	30.6	2	7.0-33.0		5	90.0		89.4	87.0-93.0
3	50.0	49.9	4	7.0-53.0	1					
VI	ELOCITY VER	IFICATION		and the second	S	YST	EM V-110		A State of S	Unit: fl/min (m/s
#	STANDARD	MEASURED	ALLOWABI	E RANGE	1	SI	ANDARD	ME	ASURED	ALLOWABLE RANGE
1	0 (0.00)	0 (0.00)	-3-3 (-0.)	02~0.02)	7	6	48 (3.29)	64	6 (3.28)	629~667 (3.19~3.39)
2	35 (0.18)	34 (0.17)	32~38 (0.	16-0.19)	8	9	96 (5.06)	.99	7 (5.06)	966~1025 (4.91~5.21)
3	64 (0.33)	64 (0.32)	61-67 (0.	31~0.34)	9	14	76 (7.50)	14	6 (7.50)	1432-1521 (7.27-7.72)
4	99 (0.50)	99 (0.50)	96~102 (0	49-0.52)	10	24	76 (12.58)	247	2 (12.56)	2401-2550 (12.20-12.95)
5	160 (0.81)	159 (0.81)	155~165 (0	(79-0.84)	11	44	98 (22.85)	454	8 (23.10)	4363-4633 (22.17-23.54)

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose accuracy is traceable w NIST, or is derived from accepted values of physical constants. TSi's calibration system is registered to ISO-9001;2008 and meets the requirements of ISO 10012;2003.

Measurement Variable	System ID	Last Cal.	Cal. Due	Measurement Variable	System ID	Last Cal.
Temperature	E001800	01-19-12	07-19-12	Température	E001799	D1-19-12
DC Voltage	E004477	12-15-11	12-15-12	Temperature	E001644	01-20-12
Pressure	E001558	12-12-11	06-12-12	Pressure	E001560	12-12-11
Velocity	E003327	09-19-07	09-19-12	Barometric Pressure	E001992	04-08-11
Humidity	E003539	02-28-12	08-28-12	DC Voltage	E001658	06-28-11
Temperature	E004402	12-08-11	06-08-12	Pressure	E001719	12-13-11
Pressure	E001721	12-13-11	06-13-12	Barometric Pressure	E001992	04-08-11
Velocity	E003327	09-19-07	09-19-12	a supervision of the second		



March 27, 2012

DATE

INS ID CERT_DEFAULT

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1701 of 1990

Cal. Due 07-19-12 07-20-12 06-12-12 04-08-12 12-28-12 06-13-12 04-08-12 14

Tektronix

Certificate of Calibration

6209119 Certificate Page 1 of 1

Instrument Identification

PO Number:

Company ID: 607229 INDUSTRIAL HYGIENE SW

Remarks:

Service Solutions

10510 SUPERFORTRESS AVE SUITE MATHER, CA 95655

Instrument ID: H225438 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 00279029

Certificate Information

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE Procedure: MINOLTA T-1M ILLUMINANCE METER Technician: Non-Responsive

Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C Humidity: 43.0 %

Tektronix Service Solutions certifies the performance of this instrument has been verified using equipment of known accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the International System of Units (SI), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL Z540.1-1994. The quality system is registered to ISO9001.

This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

Approved By: Non-Responsive Service Representative

		Calibr	ation Standards			
NIST Traceable#	Inst ID#	Description	Manufacturer	Model	Cal Date	Date Due
1700230826	17-1001076	6 STEEL RULE	STARETT	C416R-72	10Jun2010	10Jun2012
1700276206	17-2007214	1000W LIGHT BULB	OPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
1700201473	4083RC	MULTIMETER	FLUKE	8842A	25Jul2011	25Jul2012
1700201472	461952	CURRENT SHUNT	LEEDS & NORTHRUF	4360	09Aug2011	09Aug2012

6120 Hanging Moss Road - Orlando, FL 32807 - Phone: 800-438-8165 - Fax: 407-678-4854



Service Solutions

DATASHEET

Manufacturer: Minolta

Model: TL-1

Workorder #: 602492

Procedure: Manufacture

Description: Illuminance Meter

ŵ.

Date:	22-May-12
1000000000	

ILLUMINANCE										
Range	Nominal Value	As Found	Result	As Left	Result	Min	Max			
30fC (resolution: .1 fC)	10.00	10.1	P	10.1	P	9.7	10.3			
300 fC (resolution: 1 fC)	100.0	100.1	P	100	P	97	103			
3000 fC (resolution: 10 fC)	1000.0	1000.0	P	999	P	970	1030			

Note: Measurement Uncertainty = +/- 2.4% of Indication.

Page 1 of 1



MICRO FRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 (530) 268-1860

Certificate of Calibration

Date: Nov 20, 2012

MPC Control #:

Asset ID:

Size:

Temp/RH:

Gage Type:

Manufacturer:

Model Number:

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

CD3921

IAQ METER

68.9°F / 35.6 %

1245

TSI

8551

N/A

	Work Order #:	SAC-7004499
1997 - 1997 1997 - 1997	Purchase Order #:	013.IH1374.00
ALL RA	Serial Number:	51380
AND STREET	Department;	N/A
ALC: No.	Performed By:	Non-Responsive
a final faith	Received Condition:	IN TOLERANCE
	Returned Condition:	IN TOLERANCE
1. 2. 14	Cal. Date:	November 19, 2012
的是我	Cal. Interval:	12 MONTHS
	Cal. Due Date:	November 19, 2013.
TLANG COM	ALARDER STREETSEL	

Calibration Notes:

Standards Used to Calibrate Equipment

I.D. Description.	Model	Serial	Manufacturer	Cal. Due Date	Traceability #	
CC8165 MULTIFUNCTION PROCESS CALIBRATOR	726	1355148	FLUKE	Nov 5, 2013	2008120211043	Contra and
J2270 LASER PARTICLE COUNTER	200L-1-115-1	90058761A	METONE	Apr 30, 2013	2008120175502	

Procedures Used in this Event

Procedure Name Description PARTICLE COUNTER PARTICLE COUNTERS 971 TEMP/HUMIDITY METER TEMP/HUMIDITY METER (FLUKE) 971



QC Approval:



Cert No. 2008120221675

summert multiplied by the coverage factor k=2, which for normal distribution corresponds to a coverage of in acceptance with EA's Publication and NIST Technical Note 1297, 1984 Edition. Services rendered as the standard uncertainty of measu coability of approximately 95%. The standard uncertainty of measurement has been determined in acceptance with EA's Publication and NIST mply with ISO 17825/2005, ISO 9001/2008, ANSINCEL 2510-1, MPC Quelty Manual, MPC CSD and with customer perchase order instruction procability of appr

a and resulting due dates were submitted/approved by the customer. Any number of factors may cause an instrument to drift out of Iplerance before the next acheduled calibration. Recalibration cycles should be based on frequency of use, environmental conditions ar le report, pa and all for The is ts only to the instru ary.

able to SI Brough the National Institute of Standards and Technology (NIST) and/or receptized na Institution and are warranted for no less then thirty (30) days. This report may not be represented All standards are trace al standards laboratories. Services rendered include proper a without the prior written approval of the Issuing MPC lab. al or Ini

Page 1 of 1

(CERT, Rev 3)

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1704 of 1990

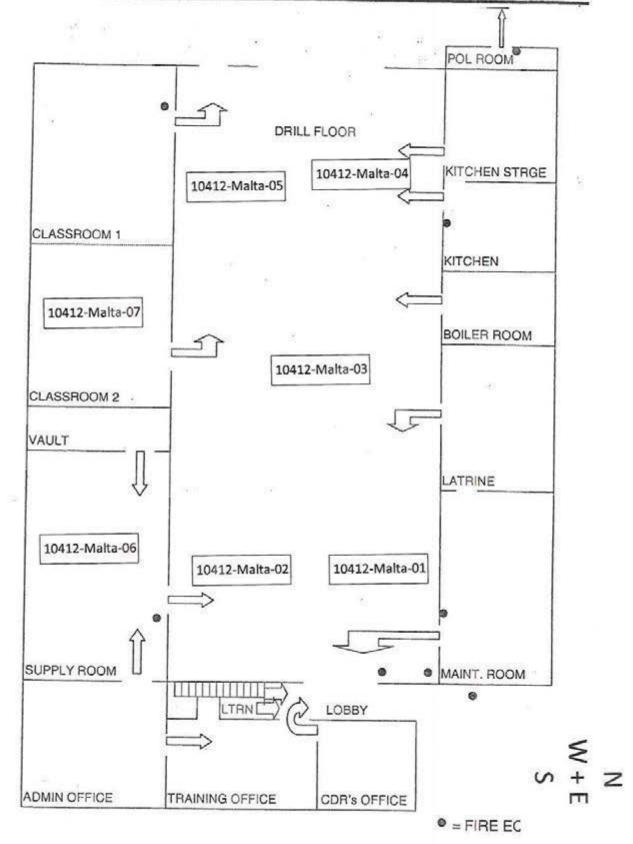
TABLE 1 LEAD WIPE SAMPLE RESULTS MALTA ARMORY **OCTOBER 4, 2012**

Sample Sample Area		Sample Location	Results (µg/ft ²)	ARNG Standard	
10412-Malta-01	Drill Floor	Northeast corner of drill floor, floor area sample	< 2.5	< 40 µg/ft ²	
10412-Malta-02	Drill Floor	Southeast corner of drill floor, floor area sample	< 2.5	<40 µg/ft ²	
10412-Malta-03	Drill Floor	Center, middle of drill floor, floor area sample	< 2.5	$< 40 \ \mu g/ft^2$	
10412-Malta-04	Drill Floor	Northwest corner of drill floor, floor area sample	< 2.5	< 40 µg/ft ²	
10412-Malta-05	Drill Floor	Southwest corner of drill floor, floor area sample	7.2	< 40 μg/ft ²	
10412-Malta-06	Gym/converted IFR	Center of room	14	< 40 μg/ft ²	
10412-Malta-07	Locker room/converted IFR	Center of room	< 2.5	< 40 µg/ft ²	

µg/ft² = micrograms per square foot ARNG = Army National Guard

Lead Wipe Sample Locations

MALTA ARMORY FIRE ESCAPE ROUTES



	T AVAILABLE COPY
	ANALYTICAL REQUEST FORM
2. Date 1014/2012 Purchase Order No. 013.14137 3. Company Name NES Address	CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES 4. Quote No

7. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED - Lise mathod number if kno	wn Unite*
	10412-Malta-01-	Grhost-Wild	6 1ft	Lead Niosit 7300	
	10412-Marta-02,		1	1	
	10412-Matta -03 1				
	10412-Malta-041				
1. 1.	10412-Malta-05.	2		4 A	
	10412-11a1ta-06.			,	
	16412-Malta-07-	V	V	\checkmark	
					-
					-
					-

* Specify: Solid sorbent tube, e.g. Charcoal: Filter type: Impinger solution: Bulk sample; Blood; Urine: Tissue; Soil; Water; Other ** 1. μg/sample 2. mg/m³ 3. ppm 4. % 5. μg/m³ 6. (other) Please indicate one or more units in the column entitled Units** Comments .

Chain of Custody (Optional) Non-Responsive	e Date/Time_ 10/9/12 12:00 pm
eceived by	Date/Time 10 9/12 2:44 P.M
slinquished	Date/Time
eceived by	Date/Time 10/11/2 D915

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1707 of 1990

ANALYTICAL REPORT

Report Date: October 15, 2012

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630

Phone: (916)	353-2370 x 20
Fax: (916)	353-2375

Responsive

Workorder: 34-1228526 Client Project ID: 013.IH1374.63/Malta, MT Purchase Order: 013.IH1374.63 Project Manager:Non-R

Analytical Results

Sample ID: 10412-Malta-01	Media: Ghost Wipe Sampling Location: Malta, MT Sampling Parameter: Area 1 ft ²			Collected: 10/04/2012
Lab ID: 1228526001				Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012
Analyte	ug/sample ug/ft ^y RL (ug/sample)			And Jack. To To Lot 12
Lead	<2.5	<2.5	2.5	

Sample ID: 10412-Malta-02	Me	Collected:	10/04/2012			
Lab ID: 1228526002	Sampling Location: Malta, MT					10/11/2012
thod: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft*				10/12/2012 10/15/2012	
Analyte	ug/sample	ug/ft ²	RL (ug/sample)		TOT TOTAL OT TA	
Lead	<2.5	<2.5	2.5			

Sample ID: 10412-Malta-03	Media: Ghost Wipe Sampling Location: Malta, MT			Collected: 10/04/2012						
Lab ID: 1228526003				Sampling Location: Malta, MT		Sampling Location: Malta, MT		Sampling Location: Malta, MT		Sampling Location: Malta, MT
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			Prepared: 10/12/2012 Analyzed: 10/15/2012						
Analyte	ug/sample ug/ft* RL (ug/sample)			CALLER MAN AND AND AND AND AND AND AND AND AND A						
Lead	<2.5 <2.5 2.5									

Sample ID: 10412-Malta-04	Media: Ghost Wipe Sampling Location: Malta, MT Sampling Parameter: Area 1 ft ²			Collected: 10/04/2012
Lab ID: 1228526004				Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012
Analyte	ug/sample ug/ft ² RL (ug/sample)			
Lead	<2.5	<2.5	2.5	

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, USA 84123 | PHONE +1 801 266 7700 | FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Laboratory Group A Campbell Brothers Limited Company Environmental 3

www.alsglobal.com

RIGHT SOLUTIONS DIGHT PARTNER

HEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1708 of 1990





ANALYTICAL REPORT

Workorder: 34-1228526 Client Project ID: 013.IH1374.63/Malta, MT Purchase Order: 013.IH1374.63 Project Manager: Monthesponette

Analytical Results

Sample ID: 10412-Malta-05	Media: Ghost Wipe Sampling Location: Malta, MT Sampling Parameter: Area 1 ft ^a			Collected: 10/04/2012
Lab ID: 1228526005				Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012
Analyte	ug/sample	Analyzed: 10/15/2012		
Lead	7.2	7.2	RL (ug/sample) 2.5	

Sample ID: 10412-Malta-06	Media: Ghost Wipe Sampling Location: Malta, MT Sampling Parameter: Area 1 ft ²			Collected: 10/04/2012
Lab ID: 1228526006				Received: 10/11/2012
Method: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012
Analyto	ug/sample	Analyzed. 10/15/2012		
Lead	14	14	RL (ug/sample) 2.5	

Sample ID: 10412-Malta-07	Media: Ghost Wipe Sampling Location: Malta, MT Sampling Parameter: Area 1 ft ^a			Collected: 10/04/2012
Lab ID: 1228526007				Received: 10/11/2012
athod: NIOSH 7300 Mod.				Prepared: 10/12/2012 Analyzed: 10/15/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)	Analyzed. Tor Tor 2012
Lead	<2.5	<2.5	2.5	

Report Authorization

Method	Analyst Peer Review		FIENCE
NIOSH 7300 Mod.	Non Responsive	Non-Responsive	

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123

Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com



ANALYTICAL REPORT

Workorder: 34-1228526 Client Project ID: 013.IH1374.63/Malta, MT Purchase Order: 013.IH1374.63 Project Manager: Norskosponske

General Lab Comments

The results provided in this report relate only to the items tested. Samples were received in acceptable condition unless otherwise noted. Samples have not been blank corrected unless otherwise noted. This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP) Utah (NELAC) Nevada Oklahoma Iowa Florida (TNI) Texas (TNI)	ADE-1420 DATA1 UT00009 UT00009 IA# 376 F871067 T104704456-11-1	http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/bsdw/labservice.htm http://www.deg.state.ok.us/CSDnew/ http://www.iowadnr.gov/InsideDNR/RegulatoryWater.aspx http://www.dep.state.fl.us/labs/bors/cos/qa/ http://www.lceq.lexas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Lead Testing: CPSC Soil, Dust, Paint Air	ACLASS (ISO 17025, CPSC) AIHA (ISO 17025, AIHA ELLAP and NLLAP)	ADE-1420 101574	http://www.aclasscorp.com http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

		BEST	AVAILABLE CO	PY		
W 1226	526				QUEST FORM	5.74
Address	NES UI sibley stre Dom, CA 970 DN-Res	3.1 H1270	RESULTS CONTACT	REQUIRED B ALS SALT LA A Quote No. ALS Projec Sampling 3 Industrial P Date of Co Time Colle Date of Sh Chain of C	DATE KE PRIOR TO SENDING SAMPLES ct Manager ollection Site Malita, MT Process Mathenal Grand process Mathenal Grand	Anwy
Laboratory Use Only	The second		6			<u> </u>
caboratory use Only	Client Sample Number	Matrix	Sample Volume	1 1 1 1 1	REQUESTED - Use method number if known	Unite**
	10412-Melta-01-	Gruss Wir	e Itt	lead	NIOSIT 7300	
	10412-Marta-02,			1	and the second se	
	10412-Matta -03					
	Inition I the all					
	10412-Malta-04					
~	10412-Malta-05.			5		
	and the state of the		_	5		

 Carlos Carlos Carlos		*	

Comments

Relinque NON-Responsive	Dato/Timo 10/9/12 12:00 pm
lecelw	Date/Time_10/9/12 2:44 P.M
elinqu	Date/Time
eceiv	Date/Time 10/11/2 0915
84123	800-356-9135 or 801-268-7700 / FAX: 801-268-9992

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1711 of 1990

	SES	& 29 11	ndard	(ii)(g	S <mark>T AVAILA</mark> BL
	REFERENCES	29 CFR 1910 1001(b) & 29 CFR 1926 1101	ASHRAE, Standard 55-1192	29 CFR 1910,1200(b)(3)(ii)	29 CFR 1910.157(e)(3)
	DATE CORRECTED				
	Estimated Cost(s)				
	ACTION				
	SUSPENSE DATE				
Hazard Inventory Log Maita Armory - MT 59538	HAZARD COUNTERMEASURE	A Montana state-certified asbestos inspector should be consulted to identify any area of the building that contains asbestos. Documentation should be kept on file of the survey at the facility. If the facility does contain asbestos, then an Operations & Maintenance Plan should be written and communicated to employees working at the facility.	Increase illumination by increasing themumber or wattage of the light fixtures, replace any burnt out bulbs, painting the walts a brighter, more reflective color, or using task lighting in poorly lit areas.	Maintain copies of all MSDS sheets in the areas where hazardous chemicals are stored.	Document fire extinguisher inspections on a monthly basis.
	RAC	e	4	4	4
	SITE	Armary	Armory	Armory	Armony
	HAZARD DESCRIPTION	A to NGB FOIA Reading	Illumination levels are insufficient in the classroom and drill floor.	MTMA-100412-4.7.1 Not all MSDS's available in Hazmat storage area	MTMA-100412-4.11 No evidence of monthly fire extinguisher inspections
0	Poster May, 2	to NGB FOIA Reading	975-34.6 Room	MTMA-100512-4.7.1	MTMA-100412-4.11

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1712 of 1990

May, 2018

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Malta Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Observations; Item 2 – Painted Surface Evaluation).

N4.4 Asbestos Documentation – A Montana state-certified asbestos inspector should be consulted to identify any area of the building that contains asbestos. Documentation should be kept on file of the survey at the facility. If the facility does contain asbestos, then an Operations & Maintenance Plan should be written and communicated to employees working at the facility.

N4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality – Increase the temperature of the Malta Armory to 68°F–75°F, per ASHRAE recommended levels.

N4.6 Illumination Level Monitoring – Increase illumination levels in classroom and Drill Floor by increasing the number or wattage of the light fixtures, replace any burnt out bulbs, painting the walls a brighter, more reflective color, or using task lighting in poorly lit areas.

N4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS) – Inventories and MSDSs should be maintained in separate binders, one for each satellite storage location (i.e. flammable storage room or cabinet). Copies of chemical inventories are provided in Appendix D.

N4.11 Safety Walk-Through – A log of monthly fire extinguisher inspections should be documented on the fire extinguishers.

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. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> <u>but check with local Environmental Office.</u>
- 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.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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.

 Pre-treated (chemically treated) dust floor mop will limit dust particles from being disbursed into the surround atmosphere.

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Samples 01 through 05 were collected from various floor surface areas on the Drill Floor.		
Are any weapons cleaned in the facility, if yes where are they cleaned?	No.		
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Samples 06 and 07.		
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	Yes there is a converted IFR; Which is now a locker room and storage room. Samples 06 and 07 were collected from these areas.		
Is there any peeling paint? Take bulk sample if able.	No.		
Are there any signs of water damage or mold?	No.		
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	No.		
Quality of housekeeping	Good.		
HVAC maintenance plan in place?	Yes through the state.		
Overall condition of HVAC system	Good working condition.		
Obtained CO2, Temp, RH monitoring	Attached to report.		
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	Inventory on hand. However needs to be updated.		
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	No incompatibilities observed during the IHSAV.		

Fire alarm in working conditionnot usually in place in older armories	No fire alarm.
Fire extinguishers in place and properly identified and mounted	Yes.
Evidence of monthly fire extinguisher inspections	No evidence of monthly fire extinguisher inspections.
Annual fire extinguisher inspections tags current	Current; due in February 2013.
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	N/A.
Egress routes accessible and properly markednoted on Fire Evacuation Plan	Yes, posted throughout the facility.
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	Hazcom training program in place.
Any Photo labs	N/A.
Any hazardous noise sources	N/A.
Light levels checked throughout building	Attached to report.
Breaker panels properly labeled with no exposed wiring	Yes.
Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.?	 One part time military personnel, 0 civilian. MP Company.
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	Not regularly. Rented out one time last year for a blood drive.
Obtain two lead air samples	On IHSW Request Only

N/A. kitchen was condemned in 2010. No longer in use.
N/A. kitchen was condemned in 2010. No longer in use.
Done
Done
Armory HC72 Malta Non-Responsive 1008 US 191 Malta, MT 406-324-5540
(Add Checklist to Report)

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	ß	Q2	Q3	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04				0
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04				
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05				0
	953-01-05				
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06				
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06				
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are recommended for control	953-01-07				
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07				0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled that are recommended for control	953-01-08				
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled	953-01-08				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09				0
Humber of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09				0
total number of DOEHRS-IH shops coded as Priority 1 which have at least one task merformed in the past 12 months	953-02-10	IHT			
Total number of DOEHRS-IH shops coded as Priority 1	953-02-10	IHT			
Mumber of buildings for which all processes requiring a basic industrial hygiene Characterization have received one within the last 12 months	953-02-11	H	2 A.		
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	IHT			
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-12	H			
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	HT			
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	H			eading F
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	IHT			

Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	H	
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	H	
Number of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	IHT	
Number of personnel who required reassessment by industrial hygiene within the last 12 months.	953-02-15	Ħ	#J-15-00 al Guard
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	IHT	
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	IHT	
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	HT	
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	IHT	F
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18		0
Noumber of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18		0
Mumber of ventilation systems which require corrective action based on deficiencies identified	953-02-19		0
Number of ventilation systems which were evaluated by an IH	953-02-19		0
Number of design review packages evaluated and addressed by an IH with recommendations applicable to occupational health concerns	953-02-20	IHT	0
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	IHT	0

Malta Armory Malta, Montana

tional Guard Bureau Page 1720 of 1990



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idabo • Utah • Wyoming • Montana • New Mesico • Nebraska

Industrial Hygiene Site Assistance Visit

Miles City Armory 2500 Main Street Miles City, MT 59301 03 Oct 2012

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1721 of 1990



DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-IHSW

23 April 2013

MEMORANDUM THRU Montana Army National Guard, ATTN: Non-Responsive (DSS), Montana Medical Det Troop Medical Clinic, Room 1009, 1956 MT Majo St, Fort Harrison, MT 59636-4789

FOR Commander Miles City Armory, 2500 Main Street, Miles City, MT 59301

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Miles City Armory, 2500 Main Street, Miles City, Montana conducted on 03 October 2012.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Miles City Armory at 2500 Main St. Miles City, MT on 03 OCT 2012.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

 a. A building inspection of the armory, for asbestos, should be provided and a management plan in place for personnel working at and on the facility should be written from that inspection. (para. 3.4) (RAC 3)

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1722 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Miles City Armory, 2500 Main Street, Miles City, Montana conducted on 03 October 2012.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the Senior Unit Commander of this Facility and any Co-Tenant Organizations or Units, review and provide assistance with implementation of these recommendations. This will educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at



NGB, IHSW, CIV Industrial Hygiene

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1723 of 1990

	5 FOG OF SC	HEDULE OF	CORRE	LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Miles City Armory. MT	AFETY AND	HEALTH STA	NDARDS		BE
		1000			SUSPENSE	ACTION	Estimated	DATE	REFERENCES
- T	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	DATE	OIC/NCOIC	Cost(s)	CORRECTED	A۱
									29 CFR 1926 1110
*	MTMCA-100312 - 3.4 available.	Facility	es	Create an aspestos Operations & Maintenance Plan and have an asbestos building survey, performed by a qualified MT asbestos building inspector.	1.044				
	MTMCA-100312 - Monthly and yearly fire 4.11 extinguisher inspections were out of date.	Armory	4	Perform monthly and yearly inspections of fire extinguishers as required.					29 CFR 1910.157(0)

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> <u>but check with local Environmental Office</u>.
- Disposable gloves should be treated as hazardous waste.
- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not</u> be permitted

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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:

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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)
 - Used regularly by soldiers or outside agencies/personnel. (Cleaned Regularly - -at least Weekly)

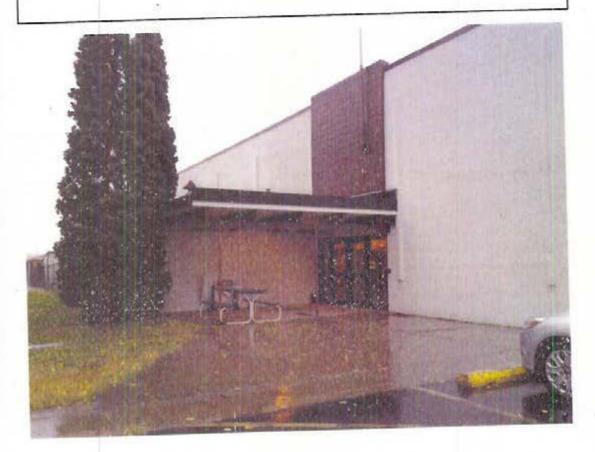
NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

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. <u>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.</u>

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.

Industrial Hygiene Site Assistance Visit Miles City Armory Miles City, Montana 3 October, 2012





www.nesglobal.net



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1729 of 1990

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

MILES CITY ARMORY 2500 MAIN STREET MILES CITY, MONTANA 59301

October 3, 2012

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1374.64

Prepared by:





Principal-In-Charge

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1730 of 1990

Table of Contents

EXEC		UMMARY1
1.0	INTRO	DUCTION
	1.1	IHSAV Objectives2
	1.2	Scope of Work
2.0	PROC	ESS DESCRIPTION
3.0	METH	ODS4
	3.1	Lead Wipe Sampling
	3.2	Water Damage and Limited Visual Fungal Growth Evaluation
	3.3	Asbestos Documentation
	3.4	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality 4
	3.5 3.6	Illumination Level Monitoring
	3.0	Hazardous Material Storage and Use Procedures
	3.8	Safety Training and Record Keeping
	3.9	Exhaust Ventilation Survey
	3.10	Sound-Level Measurements
	3.10	Safety Walk-Through
	3.12	Equipment Used
	3.13	Quality Assurance
4.0		NGS AND RECOMMENDATIONS
410	4.1	Lead Wipe Sampling
	4.2	Painted Surface Evaluation
	4.3	Water Damage and Limited Visual Fungal Growth Evaluation
	4.4	A shestos Documentation
	4.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality8
	4.6	Illumination Level Monitoring
	4.7	Hazardous Material Storage and Use Procedures9
		4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets
		(MSDS)
		4.7.2 Flammable Storage Cabinets
		4.7.3 Flammable and POL Storage
	4.8	Safety Training and Record Keeping
	4.9	Exhaust Ventilation Survey
	4.10	Sound-Level Measurements
	4.11	Safety Walk-Through
5.0	PROJ	ECT LIMITATIONS
6.0	PROJ	ECT APPROVAL12

NES. Inc. NES Job Number: 013.1H1374.64

Appendices

References Appendix A Appendix B Assessment Criteria Photo Log Appendix C Chemical Inventory Appendix D Floor Plan /IAQ - Temp, RH, & CO2 Monitoring Appendix E Ventilation Data Appendix F Field Notes Appendix G Calibration Certificates Appendix H Air Sampling & Metal/Lead Wipe Tables Appendix I Laboratory Reports Appendix J Employee List Appendix K IHSW Violation Inventory Log Appendix L Appendix M Hazard Assessments Recommendations Appendix N DD Forms 2214 Appendix O IHSW Lead-Cleanup SOP Appendix P Facility Information Worksheet Appendix Q

Appendix R Installation Status Report (ISR)

IHSAV Miles City Armory Posted to NGB/FOIA Reading Room May, 2018 NES, Inc. NES Job Number: 013.1H1374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1732 of 1990

EXECUTIVE SUMMARY

On October 3, 2012, Non-Responsive Industrial Hygiene Technician with NES, Inc. (NES) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Miles City Armory located at 2500 Main Street in Miles City, Montana. The primary point of contact for information gathered during this survey was Non-Responsive may be reached by phone at (406) 324-5470 or by email at Non-Responsive

The objectives of this IHSAV were to perform the following activities:

- · Evaluate configuration of battery storage and charging facilities;
- Review hazardous material storage and use procedures;
- Review the Respiratory Protection Program and respirator use/storage;
- · Collect area and breathing zone air samples;
- · Collect metal surface wipe samples;
- Measure the volumetric flow of local exhaust ventilation systems;
- Monitor employee noise exposures through noise dosimetry and source measurements;
- Measure illumination levels;
- Collect indoor air quality data;
- · Evaluate any existing safety hazards; and,
- Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: Non-Responsive and beyond expectations to help NES complete the IHSAV.

Page 1 of 12 BEST AVAILABLE COPY NES. Inc. NES Job Number: 013.1111374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1733 of 1990

1.0 INTRODUCTION

On October 3, 2012, Non-Responsive Industrial Hygiene Technician with NES, Inc. (NES) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Miles City Armory located at 2500 Main Street in Miles City, Montana. The primary point of contact for information gathered during this survey was **Non-Responsive** may be reached by phone at (406) 324-5470 or by email at **Non-Responsive**

1.1 IHSAV Objectives

The objective of the IHSAV is to evaluate the occupational environment of the administrative areas in the Armory to determine the presence of operational health and safety risks and make recommendations for corrective actions or follow-up work to assist the Army National Guard in managing those risks.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- · Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the armory for water damage and the presence of fungal growth;
- Review asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the condition of the Heating, Ventilation, and Air-Conditioning system and collect indoor air quality data;
- Review hazardous material storage and use procedures;
- · Review safety training, and record keeping;
- Perform a ventilation survey on the kitchen stove hood (if present);
- Perform a noise survey on the kitchen appliances; and,
- Conduct a safety walk-through evaluation and note any existing safety hazards.

NES. Inc. NES Job Number: 013.1H1374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1734 of 1990

2.0 PROCESS DESCRIPTION

The Miles City Armory has a total of 4 personnel working at the facility: two recruiters; one readiness officer; and one honor guard. The Armory has offices used for administrative purposes and also contains the following: a drill floor; classroom; supply room; kitchen; and a training room. There are no civilian employees at this Armory. Civilian functions carried out in the Miles City Armory approximately five times per year. These functions include: Christmas & Halloween parties; 4th of July float preparation; and voting ballots collections.

A new Miles City Armory is scheduled to begin construction in January 2013. The current Armory, at 2500 Main Street in Miles City, will be sold. Non-Responsive vas not aware of any additional information regarding the sale of the facility at the time of the IHSAV.

Page 3 of 12 BEST AVAILABLE COPY NES. Inc. NES Job Number: 013.IH1374.64 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1735 of 1990

3.0 METHODS

3.1 Lead Wipe Sampling

Lead wipe samples were collected on horizontal work and floor surfaces in various locations throughout the Miles City Armory. Ghost Wipe[™] brand wipes were used by wiping a one square foot template. The collected wipe samples were placed in clean and labeled centrifuge tubes. Samples were submitted to ALS Environmental Laboratories located in Salt Lake City, Utah for analysis, using NIOSH method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.

3.2 Painted Surface Evaluation

The interior and exterior of the Armory was visually inspected for peeling paint on the walls and ceilings. No paint chip samples were collected because no peeling paint was encountered.

3.3 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the Armory was visually inspected for water damage and subsequent fungal growth resulting from moisture. No areas of water damage or fungal growth were identified.

3.4 Asbestos Documentation

An evaluation of asbestos documentation was performed. During the site visit, no asbestos building survey assessment or asbestos operations and maintenance plan documentation could be found.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation, and air-conditioning (HVAC) systems that serve the Miles City Armory was accomplished. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system was performed to note any obvious operational problems.

Carbon dioxide (CO₂), temperature, and relative humidity were measured throughout the Armory using a TSI Model 8551 IAQ-Calc[™] Monitor. The unit was calibrated before use with certified zero gas and 1,000-ppm CO₂ span gas. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces.

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the Miles City Armory. The instrument used for the illumination survey was a Konica Minolta Illuminance Meter, model TL-1. Measurements taken were obtained at typical working locations such as desks, computers, workstations and general working areas.

3.7 Hazardous Material Storage and Use Procedures

A review of the Armory's chemical inventory and material safety data sheet (MSDS) file was accomplished. Chemical storage areas, i.e., flammable storage cabinets/rooms were also inspected as part of this IHSAV.

3.8 Safety Training and Record Keeping

An inspection of the Armory's training programs and training documentation was performed to determine if the site specific training programs and annual documentation is current.

3.9 Exhaust Ventilation Survey

There were no ventilation hoods operational in the facility at the time of the IHSAV. Air velocity and flow measurements could not be performed.

3.10 Sound-Level Measurements

There were no potentially hazardous noise sources identified during the IHSAV. Soundlevel measurements were not taken.

3.11 Safety Walk-Through

A safety walk-though evaluation of the Miles City Armory was performed to document the presence of a fire alarm, to determine if fire extinguishers are properly mounted and are current on their monthly and annual inspections, to inspect ground fault circuit interrupter (GFCI) electrical outlet measurements, if eyewash stations inspections are current, and to document any fire or safety hazards in the Armory.

3.12 Equipment Used

The following equipment was used for this survey:

Туре	Model Number	Serial Number	Calibration Date
Konica Minolta Illuminance Meter	TL-1	279029	May 2012
TSI IAQ-Calc [™] Meter	8551	51380	November 2012

Please see Appendix H for a complete inventory of calibration certificates that may have been used during this IHSAV.

3.13 Quality Assurance

NES employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- · Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and,

 Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

NES Inc. FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1738 of 1990

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Wipe Sampling

Wipe samples for lead dust, were collected from horizontal surfaces in selected representative areas of the Miles City Armory to determine if housekeeping efforts are successful. The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot (μ g/ft²) as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 µg/ft² is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

A total of eight Ghost WipeTM lead samples were taken during the time of the IHSAV. The first five samples were collected from the center and the four corners of the drill floor surface areas. The analytical results for the samples collected from the drill floor ranged from < 2.5 $\mu g/ft^2$ to 5.5 $\mu g/ft^2$; and are below the 40 $\mu g/ft^2$ criterion.

Additional lead wipe samples were taken from approximately 25% of the rest of the building. The three additional areas samples were collected from the following areas: the kitchen floor, the supply room floor, and the orderly room floor near the entrance. The analytical results for all the samples were below the 200 μ g/ft² criterion. The analytical results are provided in the table below.

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard (µg/ft ²)
100312-2500Miles-01	Drill Floor	Southeast corner, floor sample	5.1	≤ 40
100312-2500Miles-02	Drill Floor	Southwest corner, floor sample	3.0	≤ 40
100312-2500Miles-03	Drill Floor	Northwest corner, floor sample	5.5	≤ 40
100312-2500Miles-04	Drill Floor	Center, floor sample	5.2	≤ 40
100312-2500Miles-05	Drill Floor	Northeast corner, floor sample	3.7	≤ 40

IIISAI Miles City Armory Posted to NGB FIOIA Reading Room May, 2018 Page 7 of 12

NES, Inc. NES Job Number: 013.1111374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1739 of 1990

100312-2500Miles-06	Kitchen	Floor area sample	3.4	≤ 40
100312-2500Miles-07	Supply room	Floor area sample	<2.5	≤200
100312-2500Miles-08	Orderly Room	Floor area sample	<2,5	≤ 200
100312-2500Miles-Blank		-	<2.5	NA

See Appendix I, table 1 for lead wipe sampling analytical results. Analytical laboratory reports are provided in Appendix J.

4.2 Painted Surface Evaluation

No paint chip samples were collected because no peeling paint was identified.

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

No water intrusion issues or fungal growth was identified during the IHSAV.

4.4 Asbestos Documentation

During the site visit, no asbestos documentation could be located.

4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

The Miles City Armory utilizes a central HVAC system. The HVAC systems were all functioning and up to date on maintenance and inspections during the time of the IHSAV. Maintenance is provided through the Field Operations Company based out of Fort Harrison in Helena. All heating and cooling air is direct-ducted to the offices and the drill floor. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. Human occupants produce CO₂, water vapor, and other bioeffluents. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, *Ventilation for Acceptable Air Quality*, recommend maintaining CO₂ below a concentration that is 700 parts per million (700 ppm) above outdoor levels. Outside CO₂ concentrations are typically around 350 ppm. Carbon dioxide concentrations throughout the facility were below 1050 ppm. The highest CO₂ concentration measured was 535 ppm in the orderly room.

ASHRAE recommends maintaining temperatures between 68 and 75°F. Relative humidity should be maintained between 30% and 60% to minimize the growth of allergenic or pathogenic organisms. Building air temperatures ranged from 71.3 to 73.7°F and relative

IHSAV Miles City Armory Posted to NGB FOIA Reading Room May, 2018 Page 8 of 12

NES. Inc. NES Job Number: 013.1H1374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1740 of 1990 humidity was between 30.1% and 33.6% during the testing period. See Appendix E for IAQ data.

4.6 Illumination Level Monitoring

Illumination levels were measured throughout the facility. The numbers represent the illumination level in foot-candles (FC). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or workbench were taken at waist level.

The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 FC is the minimum lighting requirements for the performance of tasks where reading is required, 30 FC is required for work areas where reading is not required, 10 FC is required for non-work areas, such as aisles and corridors, and 5 FC is required for walking surfaces, such as mechanical spaces.

Based on the above criterion, the lighting throughout the facility is adequate for tasks being performed.

4.7 Hazardous Material Storage and Use Procedures

4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS)

Inventories of all hazardous materials used by the Miles City Armory along with their associated Material Safety Data Sheets (MSDSs) are maintained in a master binder within the facility. The master chemical inventory and MSDS binder is arranged by a Federal Stock Class and National Stock Number (NSN). The inventories and MSDSs are arranged by product name, quantity, unit of issue and shelf life. Copies of the Armory's chemical inventories are provided in Appendix D.

4.7.2 Flammable Storage Cabinets

Flammable storage cabinets were inspected and no storage incompatibilities or leaking materials were found. The lockers were in good condition and all doors were noted to close properly. Fire extinguishers were located throughout the facility offices and in the drill floor area. According to 29 CFR 1910.157(c)(1) the employer shall provide portable fire extinguishers and shall mount, locate and identify them so that they are readily accessible to employees without subjecting the employees to possible injury.

Page 9 of 12

NES. Inc. NES Job Number: 013.IH1374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1741 of 1990

4.7.3 Flammable and POL Storage

Not applicable to this facility.

4.8 Safety Training and Record Keeping

The following training documentation was found at the site:

Montana Army National Guard Safety SOP:

- Hazcom

4.9 Exhaust Ventilation Survey

Since there were no ventilation hoods operational in the facility at the time of the IHSAV, no air velocity measurements were collected from the kitchen canopy hood.

4.10 Sound-Level Measurements

Since there were no potentially hazardous noise sources identified during the IHSAV, no sound-level measurements were taken from the kitchen appliances.

4.11 Safety Walk-Through

1. Housekeeping throughout the facility was very good.

- Fire extinguishers are strategically located in the hallway and throughout the drill floor.
 Fire extinguishers were past due for monthly and annual inspections.
- A fire evacuation plan was prominently posted throughout the building. Egress routes are marked on the fire evacuation plan.

4. GFCI electrical outlets functioned properly when tested.

5.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, *NES* professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. *NES* assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of *NES*, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since *NES* is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

IIISAU Miles City Armory Posted to NGB FOIA Reading Room May, 2018 Page 11 of 12

NES. Inc. NES Job Number: 013.1H1374.64

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1743 of 1990

6.0 PROJECT APPROVAL

This IHSAV report was reviewed and approved by:



June 6, 2013 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contac **Non-Responsive Def** the Southwest Regional Industrial Hygiene Office, 916-804-1707. Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

Page 12 of 12 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.1111374.64 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1744 of 1990

APPENDIX A

REFERENCES

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process
- AR 385-10, The Army Safety Program
- Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

TB MED 503, The Army Industrial Hygiene Program

- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

APPENDIX B

ASSESSMENT CRITERIA

Ventilation Standards A.

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

Illumination Standards B.

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD-1472E.

Noise C.

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

Air Sampling D.

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH) Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1746 of 1990

Occupational Exposure Limit

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).

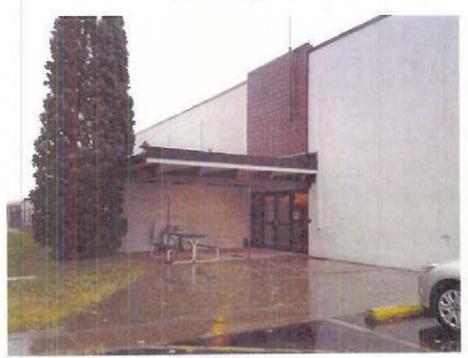


Photo 1: Front of Miles City Armory.



Photo 2: Front sign at Miles City Armory.

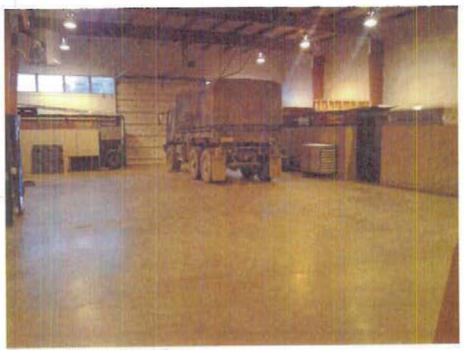


Photo 3: View of Drill floor.



Photo 4: Drill floor looking towards offices.

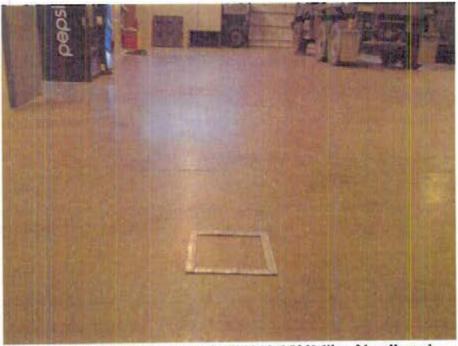


Photo 5: Lead wipe floor sample 100312-2500Miles-01 collected from southeast corner of Drill floor.



Photo 6: Lead wipe floor sample 100312-2500Miles-02 collected from southwest corner of Drill floor.

14

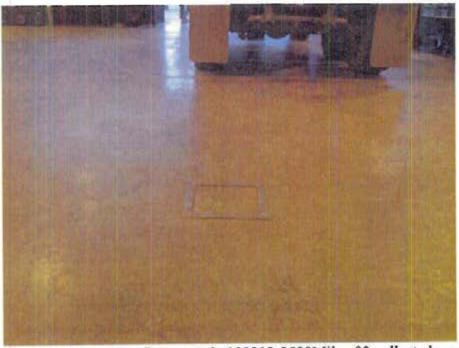


Photo 7: Lead wipe floor sample 100312-2500Miles-03 collected from northwest corner of Drill floor.



Photo 8: Lead wipe floor sample 100312-2500Miles-04 collected from center of Drill floor.



Photo 9: Lead wipe floor sample 100312-2500Miles-05 collected from northeast corner of Drill floor.



Photo 10: Lead wipe floor sample 100312-2500Miles-06 collected from kitchen.

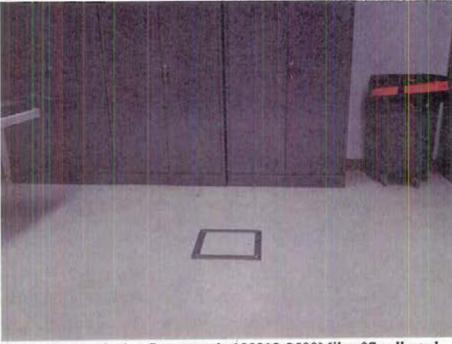


Photo 11: Lead wipe floor sample 100312-2500Miles-07 collected from supply room.



Photo 12: Lead wipe floor sample 100312-2500Miles-08 collected from orderly room.

PHOTO LOG MILES CITY ARMORY MILES CITY, MT OCTOBER 03, 2012



Photo 13: View of the vault.

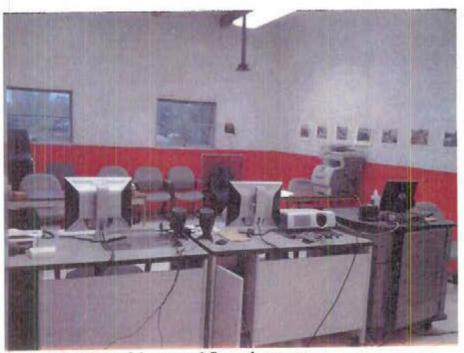


Photo 14: View of the second floor classroom.

PHOTO LOG MILES CITY ARMORY MILES CITY, MT OCTOBER 03, 2012



Photo 15: View of the kitchen.

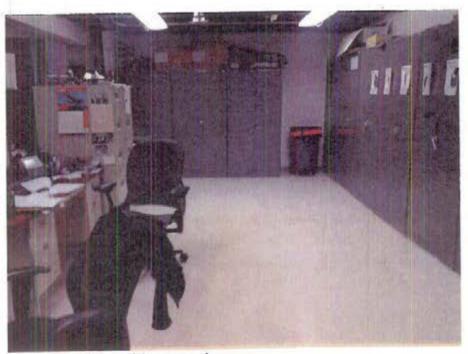


Photo 16: View of front supply room.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1755 of 1990 Montana AKNG Hazardous Materials Inventory Database: Print Inventory BEST AVAILABLE COPY

Print Inventory

Print Inventory Cancel

			Ste					
SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
1A1	Spray Paint (Smoke Gray 1608)	LOCAL PURCHASE	Krylon Products Group	24504- 0160	3	CAN	o	V3
1A2	HEAT RESISTANT PAINT	LOCAL PURCHASE	ACE	17066	10	CAN	o	V3
1A3	Flat Black 37038	8010-01-331-6108	Skillcraft / LHB	CQWGV	11	CAN	7	V3
1A4	Flat Olive Drab 34098	8010-01-331-6113	Skillcraft / LHB	CVTNT	12	CAN	7	V3
1A5	TT-E-527D ENAMEL BROWN 30372	8010-00-348-7715	Skillcraft / LHB	CQZTP	9	CAN	7	V3
1A6	GLOSS BLUE 15050	8010-01-359-9246	LHB	CQZYF	3	CAN	7	V3
1A7	ENAMEL, SUN YELLOW	LOCAL PURCHASE	Walmart Stores	78742- 0322	2	CN	0	V3
1B1	CLP	1025-01-196-2174	Break-Free / San Bar Corp	BYXXT	14	3.50Z BT	6	V4
182	CLP	9150-01-054-6453	Break-Free / San Bar Corp	BGJHY	4	вт	6	V4
1C1	PAINT, RUBBER BASE	8010-00-597-8198	GRIGGS PAINT	BPRHS	2	5GL	6	F2
1C4	Propane Fuel	6830-00-584-3041	Turner Tools / Cooper Tools	BNRQC	o	Суі	0	V3

Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT) May, 2018 http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=Heldased by National Guard Bureau012 Page 1756 of 1990 Montana ARNG Hazardous Materials Inventory Database: Print Inventory BEST AVAILABLE COPY

Print Inventory

Print Inventory Cancel

Unit: 260th (-) HORIZ ENG CO			Storage: FL03 POL Shed		Month: 12/1/2011				
SLN	Item		NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
3A1	GREASE, AUT	0	9150-01-197-7693	SUMMIT	BQYLM	16	тв	6	V6
3A2	ATF DEXTRON	ш	9150-00-698-2382	B&M	CJMVG	9	QT	7	V6
3A3	ENGINE OIL 1	ow	9150-00-189-6727	CSD INC.	DZFWY	5	QT	7	V6
3A3	ENGINE OIL 1	ow	9150-00-189-6727	SDB Consulting		6	QT	5	V6
3A3	ENGINE OIL 1	ow.	9150-00-189-6727	Salathe Oil CO.		1	QT	6	V6
3A4	Power Steerin Sealer and Conditioner	g	LOCAL PURCHASE	Mag1/ Warren Performance Products	172	2	вт		V1
381	HYDRAULIC FI	LUID	9150-00-935-9807	ROYAL LUBE	скѕкх	1	QT	6	V6
381	HYDRAULIC F	LUID	9150-00-935-9807	ROYCO	CFFFR	5	QT	6	V6
3C1	BRAKE FLUID		9150-01-102-9455	SAN JUAN	BWPTH	1	GL	6	V6
3C4	LUBE OIL, EN 15W40	GINE	9150-01-152-4117	B&M ENTERPRIZES	CIJGD	15	QT	7	V6
3C4	SAE 15W40		9150-01-421-1427	SAFETY-KLEEN SYSTEMS INC	CVCCM	18	QT	7	V6
3D1	GEAR OIL 80V	V-90	9150-01-035-5393	IMPERIAL	BGGLH	3	5GL	б	V6
Sec. 201	the state of the second state of the		and the second se	the second	And an International Accession				

Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT) May, 2018 http://ngmtenviromental:8087/mt env hmi/HMI/printInventory.asp?site=HRelbased.by:National Guard Burea012 Page 1757 of 1990

Montana ARNG Hazardous Materials Inventory Database: Print Inventory

BEST AVAILABLE COPY

3D2 AIRCRAFT GRE	EASE 9150-00-935-5851	EQUILON ENTERPRIZES	CKRZH 1	5GL	6 ⁻ V6
				0	
		а. Г			
					90
	(e)				
		¥			
8					
		2.44			
	<u> 1</u>				
	12				
	a.				
	- 22				

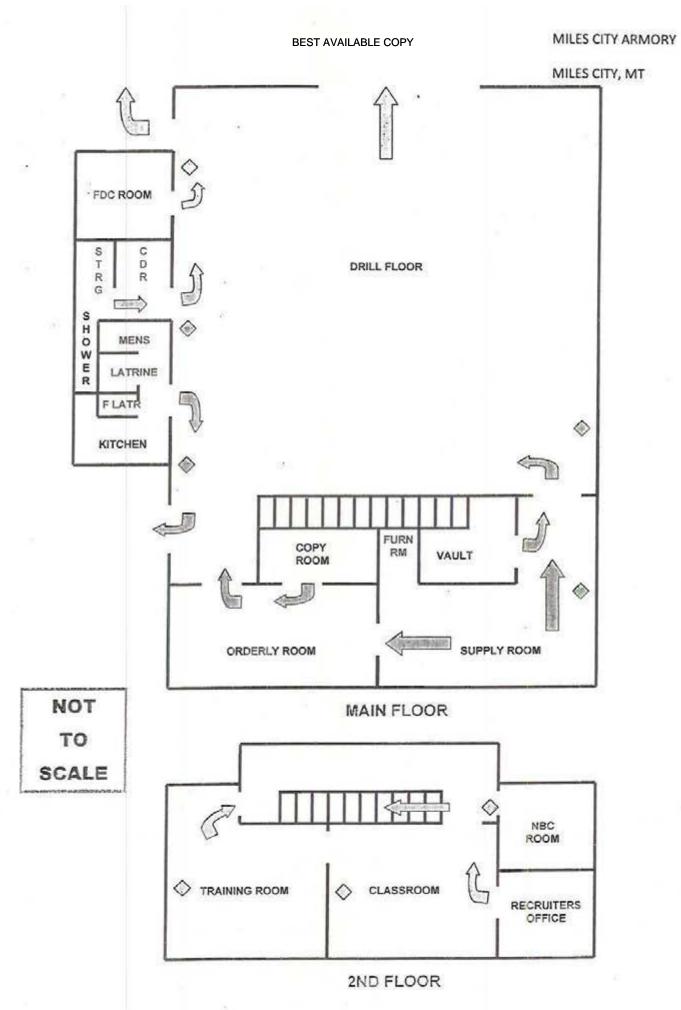
Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT) May, 2018 http://ngmlenviromental:8087/mt env hmi/HMI/printInventory.asp?site=HReleasen by National Guard Bureau 12 Page 1758 of 1990 Montana ARNG Hazardous Materials Inventory Database: Print Inventory BEST AVAILABLE COPY

Print Inventory

Print Inventory Cancel

Unit CO	: 260th	(-) HORIZ ENG		e: POL torage			Mo 12/1/2	onth: 2011
SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
PBS- SA1	Simple Green	LOCAL PURCHASE	Sunshine Makers, Inc	10013c	2	5gal	• 0	N1
PBS- SA2	Power Green	7930-01-373-8845	LHB Industries	1064090	2	Sgal	6	N1

Posted to NGB FOIA Reading Room May, 2018 http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=IRelfased by National Guard Bureau012 Page 1759 of 1990



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1760 of 1990

IAQ MEASUREMENTS MILES CITY ARMORY MILES CITY, MT OCTOBER 03, 2012

Location	CO2 max permissible level 1,035 ppm	Temperature permissible range 68 - 75°F	RH% permissible range 30-60%	CO max permissible range 200 ppm. STEL
First floor, FDC room	472	71.3	30.5	0.9
First floor, CDR room	409	71.7	30.5	0.8
First Floor, Men's latrine	407	71.5	30.9	0.9
First floor, Kitchen	411	71.3	30.8	0.9
First floor, Orderly room	535	72.7	33.6	0.9
First floor, Copy room	501	73.7	31.4	0.9
First floor, Vault room	520	73.7	32.1	1.0
First floor, Supply room	483	73.7	32.0	0.9
First floor, Drill floor	420	72.6	30.1	1.1
Northwest corner First floor, Drill floor	411	71.9	30.2	0.9
Southeast corner Second floor, Training room	429	72.5	30.4	0.8
Second floor, Classroom	425	72.8	30.7	0.7
Second floor, NBC room	477	72.5	30.9	0.7
Second floor, Recruiters office	417	72.5	30.7	0.7

CO2 - Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL - Short Term Exposure Limit

ILLUMINANCE SURVEY

MILES CITY ARMORY MILES CITY, MT OCTOBER 03, 2012

Building	Location	Light - FC	Minimum lighting requirements - FC
Armory, first floor	FDC room	30.1	30
Armory, first floor	CDR room	96.2	30
Armory, first floor	Men's latrine	30.6	10
Armory, first floor	Kitchen	34.0	50
Armory, first floor	Orderly room	74.0	50
Armory, first floor	Copy room	94.6	50
Armory, first floor	Vault room	36.8	30
Armory, first floor	Supply room	41.4	30
Armory, first floor	Northwest corner of drill floor	48.3	30
Armory, first floor	Southeast corner of drill floor	32.2	30
Armory, second floor	Training room	95.3	50
Armory, second floor	Classroom	135.3	50
Armory, second floor	NBC room	116.5	50
Armory, second floor	Recruiters office	115.5	50

*FC= foot candle measurement

BEST	AVAIL	ABLE	COPY

Page | of 2

10/03/12

Wipe Sampling	Summary Form

NES Job # 03.111374. 44 Collected By Non-Responsive

Sample # 01

Analyte

Sample Collected From Dill flor

Wipe Area	units	Date	10/3/12	Time	9:49 m-1

Sample# 02

Analyte

Sample Collected From Dnil floor

Wipe Area	units	Date	10/3/12	Time	9:53 AN

Sample # 03

Analyte Sample Collected From Phil floor

Wipe Area units Dat	e 10/3/12	Time	3.55 AN
---------------------	-----------	------	---------

Sample # 04

.

Analyte		the second second		
Sample	Collected	From	DHI	f 100

Wipe Area	units	Date	10/3/12	Time	3:57 44
	the second se	torna and and and and and and and and and a			

V

tiour

Sample # 05 Analyte

Sample Collected From dill

Wipe Area units Date 10/15/12 Time

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, California 95630

BEST AVAILABLE COPY

8.54 41

BEST	AVAIL	ABLE	COPY

Page <u>2</u> of <u>2</u> 10/03/12

Wipe Sampling Summary Form

		# 013. 1H1		
(Collected	By_Non-Re	sponsive	
Sample # Analyte				
Sample C	Collected	From	at the plum 1	lai
Wipe Are	<u>ea</u>	units	<u>Date 10 2 12</u>	
Sample # Analyte	F			
And the rest of the second s	Collected	From S	iupply ritim	
Wipe Are	<u>ea</u>	units	Date 16/2/12	Time 9'65 AM
Sample # Analyte Sample C		From Md	erly ram envance	
Wipe Are	<u>ea</u>	units	Date	<u> </u>
<u>Sample #</u> <u>Analyte</u> Sample (From		
Wipe Are		units	Date	<u>Time</u>
Sample # Analyte	<u> </u>			
	Collected	From	£.	
Wipe Are	ea	units	Date	Time
		114	ronmental Systems, Inc. I Sibley Street California 95630	

BEST AVAILABLE COPY

Lead Samples

N

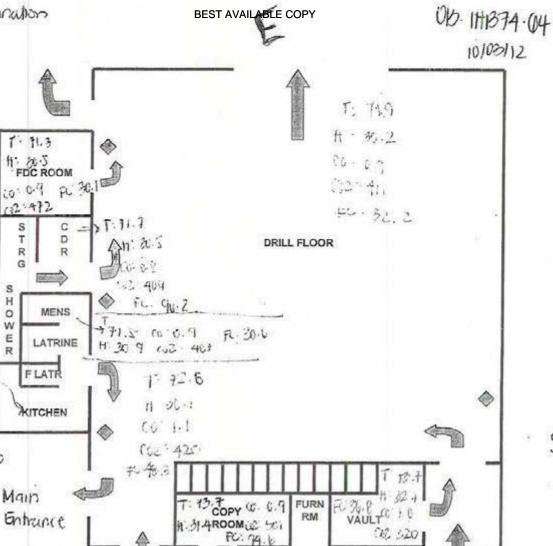
013.1111374.64 10/03/12 F 5 · FDC ROOM 0 STRG CD DRILL FLOOR R 0 31 SHOWE ٢ MENS LATRINE R FLATR 2 ۲ 0 KITCHEN ۲ Hein 7 Entrance FURN COPY ROOM RM VAULT S 7 Ø ORDERLY ROOM SUPPLY ROOM NOT MAIN FLOOR TO SCALE NBC ROOM ۲ TRAINING ROOM CLASSROOM RECRUITERS OFFICE 2ND FLOOR

N

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1765 of 1990





S

۲

N



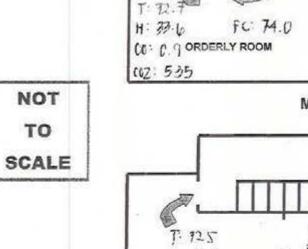
T 71.3

H: 36 8

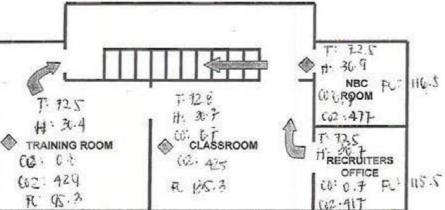
10:1.1

(2 411

FL 240



MAIN FLOOR



TIDT

1. 22.0

(01: 0-7 (02: 400 SUPPLY ROOM

FL: 41.4

2ND FLOOR

W

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1766 of 1990

Hilles City Armarij (Faci finding) 10/3/12 013.141379.64 - amplyce list Maps chum inventory list Violiner Inventory lig - fulling map. -1.40 V - Light / - Lead samples 1 - Phili way POU: on-Responsive Fact Finding " Armon 1 is going to start being built in January 2013. offices miles city is used for recruiting. a going feicility, don't know Sell to much about the when its going to juppen

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1767 of 1990

	BEST AVAILABLE COPY
	Miles Cry Amiery 013.1111.374.44 10/3/12
and a second second from the	Ive lig
	ti-to -> lee sciniples
	- Cij: Sigin
New Address of the Contract Contraction of	11 milding (firt)
	IF Kuklinj
-	-12 millaing
	12: ann Incir
	H: Khunon
	15 office (1st flow, lett)
	16: Other (15) Her ind Kan up 101)
	17. divit floor (touched other, view or 2nd flor.)
0	19 Ind flar + < lastoom
	19. hainny nom
	20. dill flur (view ham 2rd flag)
	21. supply noon (Front area)
	R2. Veiulj-
an ann ann i s ann an an dearann	27. supply win? (buck)
(1) (1 (1) (1) (1) (1) (1) (1) (1) (1) (
A 14 A 140 A 14 A 14 A 14 A 14 A 14 A 14	

ARNG Site Assistance Visit Checklist

General Information			
Facility:Mi	es City Armony		
			59301
Number of Employees	s:	Dates: 10/3/12	()
Cranes/Hoists: Respirators: Hearing Protection: _	WA s: vailable: MA MA MA	Equipment used: Fall Protection:	MA MA NG
Flammables Cabinets	MA		
	rviced: 14st semiced /inspicied	Inspected: Sept. 2011	Ø
Ventilation MA			
Paint Booth:	Friends (Mar)		Welding:
Soldering:	Carpenter:		Other?:
Noise MA Noise Dosimetry:			
SPL Measurements:	Pneumatics: Welding: Machinery: Vehicles:		
Posted to NGB FOIA Readin May, 2018	ng Room	F	OIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1769 of 1990



Certificate of Calibration

6209119 Certificate Page 1 of 1

Instrument Identification

PO Number Non-Responsi

Company ID: 607229 INDUSTRIAL HYGIENE SW

Remarks:

Service Solutions

10510 SUPERFORTRESS AVE SUITE MATHER, CA 95655

Instrument ID: H225438 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 00279029

Certificate Information

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE Procedure: MINOLTA T-1M ILLUMINANCE METER Technician: Non-Responsive

Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C Humidity: 43.0 %

Tektronix Service Solutions certifies the performance of this instrument has been verified using equipment of known accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the International System of Units (SI), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL Z540.1-1994. The quality system is registered to accuracy

This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

Approved By Non-Responsive

Service Representative

		Calibration Standards			
lost IDd	Description	Manufacturer	Model	Cal Date	Date Due
		STARETT	C416R-72	10Jun2010	10Jun2012
17-1001076		OPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
17-2007214	1000W LIGHT BULS		ATTANAN C	25 M/2011	25JUI2012
4083RC	MULTIMETER			and the state of the second second	09Aug2012
461952	CURRENT SHUNT	LEEDS & NORTHRUI	4360	CBAUG2011	Variageo iz
	Sellinger mon	17-1001076 E STEEL RULE 17-2007214 1000W LIGHT BULB 4063RC MULTIMETER	Inst. ID# Description Manufacturer 17-1001076 8 STEEL RULE STARETT 17-2007214 1000W LIGHT BULB OPTRONIC LABS 4063RC MULTIMETER FLUKE	Inst. ID# Description Manufacturer Model 17-1001076 8 STEEL RULE STARETT C416R-72 17-2007214 1000W LIGHT BULB OPTRONIC LABS OL FEL-P-K 4063RC MULTIMETER FLUKE 8042A	Inst. ID# Description Menotecure Inst. ID# 17-1001076 6 STEEL RULE STARETT C416R-72 10Jun2010 17-2007214 1000W LIGHT BULB OPTRONIC LABS OL FEL-P-K 17Feb2012 4063RC MULTIMETER FLUKE 8642A 25Jul2011 4063RC MULTIMETER LEEDS & NORTHRUE 4360 09Aug2011

6120 Hanging Moss Road • Orlando, FL 32807 • Phone: 800-438-8165 • Fax: 407-678-4854

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1770 of 1990

CRO PRECISION LIBRATION INC.

MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 (530) 268-1860

Certificate of Calibration

Date: Nov 20, 2012

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

and the second	A Start Start
MPC Control #:	CD3921
Asset ID:	1245
Gage Type:	IAQ METER
Manufacturer:	TSI
Model Number:	8551
Size:	NIA
Temp/RH:	68.9*F / 35.6 %

Calibration Notes:

Calibrating

Cert No.

2008120221675

1	Work Order #:	SAC-7004499
	Purchase Order #:	013.IH1374.00
ł	Serial Number:	51380
,	Department	N/A
	Performed By:	on-Responsive
į	Received Condition:	IN TOLERANCE
	Returned Condition:	IN TOLERANCE
	Cal. Date:	November 19, 2012
	Cel, interval:	12 MONTHS
ŝ	Cal. Due Date:	November 19, 2013
		The second second second second

Standards Used to Calibrate Equipment

ND:	Description.	Model	Senal Manufacturer	Cal. Due Date Tracebi	ity #
CC8185	MULTIFUNCTION PROCESS	726	1355148 FLUKE	Nov 5, 2013 20081202	11043
J2270	CALIBRATOR LASER PARTICLE COUNTER	200L-1-115-1	90058781A MET ONE	Apr 30, 2013 20061201	75502
A	Hand in this Examt		The statistics and shall be a		Sand S.

Procedures Used in this

Description **Procedure Name** PARTICLE COUNTERS PARTICLE COUNTER TEMPHUMIDITY METER (FLUKE) 971 971 TEMP/HUMIDITY METER

Technician:	Ion-Responsive	QC Approva	Non-Responsive
S. 20. 11. 1		States .	
100		AT A STA	
- Salara	Manufacture and the second	Sugar Barne	a de mar de la dialected de la baix

HIP EA's Pub on and NIST Te 1297, 1994 Edil on. Services rendered 190 17025/2005, ISO 9001 2008, ANSINCEL 2540-1. 00 A MEC COD

fore the next acheculed celb w of h ant to drift out of tolers tors may cause an instrum s and re tion on this moont, pertains only to the Instrument

d include pro al institute of Standards and Technology (NIST) and/or rec of far no less than Takly (30) days. This report may not be r 8. oh the Mate All static (CERT, Rev.3)

Page 1 of 1

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1771 of 1990

TABLE 1 LEAD WIPE SAMPLE RESULTS MILES CITY ARMORY MILES CITY, MT OCTOBER 03, 2012

Sample Number	Sample Number Sample Area Sample Location		Results (µg/ft ²)	ARNG Standard (µg/ft ²)
100312-2500Miles-01	Drill Floor	Southeast corner, floor sample	5.1	≤40
100312-2500Miles-02	Drill Floor	Southwest corner, floor sample	3.0	≤ 40
100312-2500Miles-03	Drill Floor	Northwest corner, floor sample	5.5	≤ 40
100312-2500Miles-04	Drill Floor	Center, floor sample	5.2	≤40
100312-2500Miles-05	Drill Floor	Northeast corner, floor sample	3.7	≤ 40
100312-2500Miles-06	Kitchen	Floor area sample	3.4	≤ 40
100312-2500Miles-07	Supply room	Floor area sample	<2.5	≤200
100312-2500Miles-08	Orderly Room	Floor area sample	<2.5	≤200
100312-2500Miles-Blank	NA	NA	NA	NA

 $\mu g/ft^2$ = micrograms per square foot ARNG = Army National Guard NA = not applicable

ND = none detected at or above the analytical detection limit



ANALYTICAL REPORT

Report Date: October 10, 2012

Ion-Responsive

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630 Phone: (916) 353-2370 x 20 Fax: (916) 353-2375



Workorder: 34-1228244 Client Project ID: Miles City Armor Purchase Order: 013.IH1374.64 Project Manage Non-Responsive

Analytical Results

Sample ID: 100312-2500 Mile-01	Media: Ghost Wipe Sampling Location: Miles City Armory Sampling Parameter: Area 1 ft ²			Collected: 10/03/2012	
Lab ID: 1228244001				Received: 10/08/2012	
Method: NIOSH 7300 Mod.				Prepared: 10/09/2012 Analyzed: 10/09/2012	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	The second second	
Lead	5.1	5.1	2.5		

Sample ID: 100312-2500 Mile-02	Med	dia: Ghost Wipe	Collected: 10/03/2012	
Lab ID: 1228244002	Sampling Locat	ion: Miles City A	Received: 10/08/2012	
Method: NIOSH 7300 Mod.	Sampling	g Parameter: Ar	Prepared: 10/09/2012 Analyzed: 10/09/2012	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	3.0	3.0	2.5	

Sample ID: 100312-2500 Mile-03	Mee	Collected: 10/03/2012		
Lab ID: 1228244003	Sampling Location: Miles City Armory			Received: 10/08/201
Method: NIOSH 7300 Mod.	Samplin	Prepared: 10/09/2012 Analyzed: 10/09/2012		
Analyte	ug/sample	ug/ft ^a	RL (ug/sample)	
Lead	5.5	5.5	2.5	

Sample ID: 100312-2500 Mile-04	Me	Collected: 10/03/2012		
Lab ID: 1228244004	Sampling Location: Miles City Armory			Received: 10/08/2012
Method: NIOSH 7300 Mod.	Samplin	Prepared: 10/09/2012 Analyzed: 10/09/2012		
Analyte	ug/sample	ug/ft²	RL (ug/sample)	All a second and the
Lead	5.2	5.2	2.5	

ADDRESS 960 West LeVoy Drive. Salt Lake City, Utah, USA 84123 PHONE +1 801 266 7700 FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Laboratory Group A Campbell Brothers Limited Company

www.alsglobal.com

NIGHT SOLUTIONS GROUP CONTINUES

Page 1 of 3 Posted to NGB FOIA Reading Room May, 2018

ulronaum

WEST AVAILABLE COPY

IHREP-V10.9 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1773 of 1990



ANALYTICAL REPORT

Workorder: 34-1228244 Client Project ID: Miles City Armor Purchase Order: 013.IH1374.64 Project Manager: Non-Responsive

Analytical Results

Sample ID: 100312-2500 Mile-05	Media: Ghost Wipe Sampling Location: Miles City Armory			Collected: 10/03/2012
Lab ID: 1228244005				Received: 10/08/2012
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			Prepared: 10/09/2012 Analyzed: 10/09/2012
Analyte	ug/sample	ug/ft*	RL (ug/sample)	C (Contraction of the second
Lead	.3.7	3.7	2.5	

Sample ID: 100312-2500 Mile-06	Media: Ghost Wipe Sampling Location: Miles City Armory			Collected: 10/03/2012
Lab ID: 1228244006				Received: 10/08/2012
Method: NIOSH 7300 Mod.	Samplin	g Parameter: An	Prepared: 10/09/2012 Analyzed: 10/09/2012	
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	
Lead	3.4	. 3.4	2.5	

Sample ID: 100312-2500 Mile-07	Media: Ghost Wipe Sampling Location: Miles City Armory			Collected: 10/03/2012
Lab ID: 1228244007				Received: 10/08/201
Method: NIOSH 7300 Mod.	Samplin	Prepared: 10/09/2012 Analyzed: 10/09/2012		
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	<2.5	<2.5	2.5	

Sample ID: 100312-2500 Mile-08	Media: Ghost Wipe				Collected: 10/03/2012
Lab ID: 1228244008	Sampling Location: Miles City Armory			Received: 10/08/2012	
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²				Prepared: 10/09/2012 Analyzed: 10/09/2012
Analyte	ug/sample	C1,2%.	ug/ft ^z	RL (ug/sample)	
Lead	<2.5		<2.5	2.5	

Sample ID: 100312-2500 Mile-09	Media: Ghost Wipe Sampling Location: Miles City Armory			Collected: 10/03/2012
Lab ID: 1228244009				Received: 10/08/2012
Method: NIOSH 7300 Mod.	Samplin	g Parameter: Ar	Prepared: 10/09/2012 Analyzed: 10/09/2012	
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	
Lead	<2.5	NA	2.5	

Report Authorization

Method	Analyst	Peer Review
NIOSH 7300 Mod.	Non-Responsive	Non-Responsive



ANALYTICAL REPORT

Workorder: 34-1228244 Client Project ID: Miles City Armor Purchase Order: 013.IH1374.64 Project Manager Non-Responsive

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com

General Lab Comments

The results provided in this report relate only to the items tested. Samples were received in acceptable condition unless otherwise noted. Samples have not been blank corrected unless otherwise noted. This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP) Utah (NELAC) Nevada Oklahoma Iowa Florida (TNI) Texas (TNI)	ADE-1420 DATA1 UT00009 UT00009 IA# 376 E871067 T104704456-11-1	http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/bsdw/labservice.htm http://www.deq.state.ok.us/CSDnew/ http://www.icwadnr.gov/InsideDNR/RegulatoryWater.aspx http://www.dep.state.fl.us/labs/bars/sas/qa/ http://www.tceq.texas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Lead Testing: CPSC Soil, Dust, Paint ,Air	ACLASS (ISO 17025, CPSC) AIHA (ISO 17025, AIHA ELLAP and NLLAP)	ADE-1420 101574	http://www.aclasscorp.com http://www.aihaaccreditediabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.

ND = Not Detected, Testing result not detected above the LOD or LOQ.

** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

IHREP-V10.9

₩ 1228244	ANALYTICAL REQUEST FORM
ALS	RUSH Status Requested - ADDITIONAL CHARGE RESULTS REQUIRED BY DATE CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES
2. Date 10/05/12 . Purchase Order No. 0	10. 1H1374.04 4. Quote No. Non-Responsive
3. Company Name <u>NES</u> Address <u>1141 SIbity St</u> TOISOM (A. 95480	ALS Project Manager 5. Sample Collection Sampling Site
Person 1 Non-Res Telepho Fax Tele	Dete of Collection Time Collected
E-mail A	Date of Shipment
Billing A	Chain of Custody No.
	6. How did you first learn about ALS?

7. REQUEST FOR ANALYSES

Laboratory Use Only	Client Sample Number	Matrb*	Sample Volume	ANALYSES REQUESTED - Use method number If known	Units**
-	100312-2500 Miles -01	Chur wipes	lig ft	Lead MOSH 7300	49/50:
	101212 - 2500 Miks -02	1			1
	1002+12-2500. Hiles-07				
	110212-2500 Mild -04				
	100312-2500 Miles -115				
	100772-2500 MKS -06				
	1012-2500 1119-07		-		
	100012 - 25W MINO -08	V			14
1	100812-0502-116-18/2011		V	v	V
	the second second				
Volume and States	a second s			e: Blood; Urine; Tissue; Soil; Water; Other	

Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Sol; Water; Other
 1. µg/sample
 2. mg/m³
 3. ppm
 4. %
 5. µg/m³
 6. (other)
 Please indicate one or more units in the column entitled Units**
 Comments

			1000
Possible	Contamination and	or Chemic	al Hazards

Possible Gondamination and Growthour reaction	
7. Chain of	nonoivo
Relinquished	
Received by	Date/Time_10-06-15-9:44
Relinquished	Date/Time
Received by	Date/Time
960 West LeVoy Drive / Salt Lake City, U	T 84123 800-356-9135 or 801-266-7700 / FAX: 801-268-9992
	ALS Laboratory Group
Destad to NOR FOLA Destalian Desta	REST AVAILABLE CODY

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1776 of 1990

e

Reference DA FORM 4754

Page 1

BEST AVAILABLE COPY

6	LOG OF S	CHEDULE OF	CORRE	LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY Miles City Armory, MT	FETY AND	Y AND HEALTH STANDARDS	NDARDS		
CONTROL					TISPENSE	ACTION	Estimated	DATE	
NUMBER	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	DATE	OIC/NCOIC	Cost(s)	CORRECTED	REFERENCES
CLOSED X	a substantial and a substantial substant	- Street	1000			And the second second second	AND AND AND		
MTMCA-100312 - 3.4	MTMCA-100312 - 3-4 asbestos building survey was available	Facility	ŵ	Create an asbestos Operations & Meintenance Plan and have an asbestos building survey performed by a qualified MT asbestos building inspector.					78 MED 513
MTMCA-100312 - 4.11	Monthly and yearly fire extinguisher inspections were	Armory	4	Perform monthly and yearly inspections of fire extinguishers as required.					28 CHK 1910/15/(0

Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1777 of 1990

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction - This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Miles City Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Findings and Recommendations; Item 2 – Painted Surface Evaluation).

N4.11 Safety Walk-Through

Perform monthly and yearly inspections of fire extinguishers as required.

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> but check with local Environmental Office.
- 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.

- Drums shall be properly labeled to identify contents In-Accordance With (IAW) Federal, State and local regulatory guidance.
- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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:

 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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)
 - 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. <u>Please notify your Safety and/or Occupational Health personnel of the</u> <u>completion of this cleaning regime and they will notify the proper officials of the</u> 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.

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Yes. Samples 100312-2500Miles-01, 02, 03, 04, 05
Are any weapons cleaned in the facility, if yes where are they cleaned?	No
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Yes. Samples 100312-2500Miles-06, 07, 08
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	No
Is there any peeling paint? Take bulk sample if able.	No
Are there any signs of water damage or mold?	No
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	No .
Quality of housekeeping	Very good
HVAC maintenance plan in place?	Yes. Maintenance is provided through the Field Operations Company based out of Fort Harrison in Helena.
Overall condition of HVAC system	Good working condition
Obtained CO2, Temp, RH monitoring	Yes
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	Yes. Last updated 12/1/2011
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	Storage good. Lockers labeled and in good condition & organized.

Fire alarm in working conditionnot usually in place in older armories	Yes
Fire extinguishers in place and properly identified and mounted	Yes.
Evidence of monthly fire extinguisher inspections	No. Outdated
Annual fire extinguisher inspections tags current	No. Last inspection Sept 2011
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	N/A
Egress routes accessible and properly markednoted on Fire Evacuation Plan	Yes
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	Yes. Montana Army National Guard Safety SOP Hazcom
Any Photo labs	No
Any hazardous noise sources	No
Light levels checked throughout building	Yes
Breaker panels properly labeled with no exposed wiring	Yes
Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.?	 4 personnel 2 recruiters, 1 readiness officer, & 1 honor guard
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	Yes. Rented throughout year to host parties.
Obtain two lead air samples	On IHSW Request Only

4

Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	No working Stove
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	N/A
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	None found
<u>Take photos</u> of outside of building, all sample points and any pertinent hazards or concerns.	No Hazards
Name of Armory, POC, phone #, address and organizations in Armory (Add Checklist to Report)	Miles City Armory 2500 Main Street Miles City, Montana Non-Responsive
	(Add Checklist to Report)

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	2	QŽ	Q3	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04	-	ľ	-	
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04	00			
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05	0			
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are recommended for control	953-01-07	c			
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07	0			
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled, that are recommended for control	953-01-08	0			
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled	953-01-08	s			
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09	5			
Namber of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09	0			
Togal number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	HT			
Teal number of DOEHRS-IH shops coded as Priority 1	953-02-10	커			
No mber of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	H			
Number of buildings requiring a basic industrial hygiene characterization within the last 12 menths	953-02-11	Ę			
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-12	Ę			
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	E			
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	H I			
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	독 :			
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	Ŧ			
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	5			

Miles City Armor, Miles City, Montana

-
ni i
~
00
N
0
B. 1

Miles City Armory Miles City, Montana

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	ß	Q2	Q3	Q4 Annual
Number of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	Ŧ			
Number of personnel who required reassessment by industrial hygiene within the last 12 months.	953-02-15	Ę			
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	H			
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	5			
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	Ħ			
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	耳			
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18	0			
Ngmber of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18	0			
Number of ventilation systems which require corrective action based on deficiencies identified during an IH survey	953-02-19	•			
Number of ventilation systems which were evaluated by an IH	953-02-19	•			
ations	953-02-20	독			
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	Ħ			



Guam + Hawaii + California + Oregon + Washington + Nevada + Arizona + Idaho + Utah + Wyoming + Montana + New Mexico + Nebraska

Industrial Hygiene Site Assistance Visit

Sidney Armory Indoor Firing Range (IFR) 2190 W. Holly Street

Sidney, MT 59270

30 oct 2013

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1788 of 1990



BEST AVAILABLE COPY DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-P

19 January 2014

MEMORANDUM THRUNOn-ResponsiveDSS, 1956 Mt. Majo St., Room 1009, Helena, MT 59636

FOR Commander Sidney Armory Indoor Firing Range (IFR) at 2190 W. Holly St., Sidney, MT 59270

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Sidney Armory Indoor Firing Range (IFR) at 2190 W. Holly St., Sidney, MT on 30 OCT 2013.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Sidney Armory Indoor Firing Range (IFR) at 2190 W. Holly St., Sidney, MT on 30 OCT 2013.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

a. <u>Increase temperatures</u> throughout the facility to meet the ASHRAE recommended range 68-75 degrees Fahrenheit (para. 5.5) (RAC 4)

b. Post warning signage at the entryway(s) of the facility and on Converted IFR door(s) to warn

BEST AVAILABLE COPY

ARNG-CSG-P

BEST AVAILABLE COPY

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Sidney Armory Indoor Firing Range (IFR) at 2190 W. Holly St., Sidney, MT on 30 OCT 2013

pregnant or nursing females and children under 7 years of age that there is a potential for elevated lead dust in this facility/area. Make sure staff and maintenance personnel are aware of the associated lead hazards. (Exec. Summary) (RAC 3)

c. <u>Continue Good Housekeeping Practices</u> within the armory and utilize SOP included to help prevent migration of noted lead dust in this Converted IFR and with weapons cleaning episodes. (Exec. Summary) (RAC 3)

d. <u>Prohibit use of the converted IFR</u> (workout room) until the area is cleaned of lead below ARNG thresholds. Utilize NGP 420-15 Conversion of Indoor Firing Ranges (IFR) to have IFR properly cleaned this time around. Clean the workout area in accordance with the Armory SOP for lead cleanup accompanying this report. Have <u>follow-up testing</u> conducted to meet acceptable concentrations. (para. 5.3) (RAC 2)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

1. Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

 Corrective measures should be implemented and accomplished at the lowest levels possible. Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

3. Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

 Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

5. The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1790 of 1990

ARNG-CSG-P

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Sidney Armory Indoor Firing Range (IFR) at 2190 W. Holly St., Sidney, MT on 30 OCT 2013

 a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the <u>Montana</u> Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the <u>Senior Unit Commander of this Facility and any Co-Tenant Organizations or</u> <u>Units, review and provide assistance with implementation of these recommendations.</u> This will educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the NGB-IHSW office at (916) 854-1491 or via email at

Non-Responsive

Non-Responsive

NGB, IHSW, CN Industrial Hygiene

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1791 of 1990



Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Sidney IFR - Sidney, MT

BEST AVAILABLE COPY CLOSED 10302013-5.3 CONTROL NUMBER MTSIFR-ASHRAE recommended range Temperatures are below the Lead concentrations exceed HAZARD DESCRIPTION established criteria Converted IFR Facility SITE RAC 4 N cleanup. Have follow-up testing Clean the locker in accordance conducted to meet acceptable IFR until the area is cleaned of with the Armory SOP for lead throughout the facility to meet lead below ARNG thresholds. Prohibit use of the converted the ASHRAE recommended CORRECTIVE ACTIONS Increase temperatures (Abatement Plan) concentrations. range. SUSPENSE DATE OIC/NCOIC ACTION Estimated Cost(s) CORRECTED DATE 1910,1025 (h)(1) & NGP 420-15 REFERENCES ASHRAE 62.1-2010 29 CFR

OIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1792 of 1990

Page 1 of 1

ARMORY

CLEANUP & FOLLOW-UP HOUSEKEEPING RECOMMENDATIONS

Materials Needed:

- Cloth Mop head (s) & Mop head holder(s) with handle.
- 2. Mop bucket (s) with wringer.
- Clean cotton rags and sponges.
- 4. Disposable gloves
- 5. Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

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.
- Disposable gloves should be treated as hazardous waste.
- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- Final rinse should be with clean water only after mop heads have been cleaned.

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

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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.

BEST AVAILABLE COPY EQUIPMENT LIST Sidney Armory

ITEM	VSN/USA	S/N
10T DUMP TRUCK (M1157)	NP2MPH	10TDJAU58BS724368
	NP2MPZ	10TDJAU58BS728100
	NP2MPY	10TDJAU59BS727148
	NP2MPM	10TDJAU5985727165
	NP2MPJ	10TDJAU5XBS724341
	NP2MPK	10TDJAU5XBS724372
	NP2MPU	10TDJAU5XBS727157
10T DUMP TRAILERS (M1059)	PBOG5J	10TDC1527CS734082
	PB0G5Q	10TDC1520CS734084
	PB0H9G	10TDC1528CS746502
	PBOG55	10TDC1529CS733905
	PBOG5T	10TDC152XCS733928
	PB0G5N	10TDC152XCS734092
	PB0H92	10TDC152XCS746503
TRK TRACTOR (M1088)	NL1GT5	T019975BFCN
	NL1GT4	T019974BFCN
SEMITRAILER LOW BED (M172A1)	7G2613	9072
	7F5779	7552
HMEE	UC09TS	GEOHMEE1T01063324
	UC09TG	GEOHMEE1C01063314
SKIDSTEER (M400W)	UA07FK	NCM459274
SKIDSTEER (M400T)	NZ3G8T	NCM459770
HMMWV (M1165)	NZ2QFE	328153
OE-254 ANTENNA		11082E
CLEANING KIT GUN BORE		693
TENT		
CHEMICAL MASK: M40		4240013703822
		4240013703822
		4240013703822
		4240013703822
		4240013703822
GEN MECHANIC TOOL KIT		5180014830249
SURVEYING SET		6675006413639
SKETCH SE SURVEY MIL F		6675006413632
CHEM AGENT MONITER		Z47-C-46337
		Z47-C-46359

.12

BEST AVAILABLE COPY EQUIPMENT LIST Sidney Armory

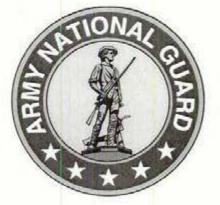
COMPASS MGNT	1290009304260
	1290009304260
	1290009304260
	1290009304260
SCRAPER BII	KEH00194
CARPENTERS SQUAD BOX	5180014472200
RADIO MOUNTS	193170
	187916
	193133
	192779
	192745
	193077
	028055AA
RADIO	031346A
7	

Industrial Hygiene Site Assistance Visit Sidney IFR (Converted) Sidney, Montana October 30, 2013





www.nesglobal.net



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1799 of 1990

1

TABLE OF CONTENTS

Exec	UTIVE S	SUMMARY	1
1.0	INTRO	DDUCTION	2
	1.1	Objectives	2
	1.2	Scope of Work	2
2.0		ESS DESCRIPTION	
3.0	METH	IODS	4
	3.1	Air Monitoring – Carbon Monoxide	4
	3.2	Breathing Zone Air Sampling	4
	3.3	Lead Wipe Sampling	4
	3.4	Painted Surface Evaluation	4
	3.5	Indoor Air Quality	4
	3.6	Illumination Level Monitoring	5
	3.7	Exhaust Ventilation Survey	5
	3.8	Personal Noise Dosimetry & Sound-Level Measurements	5
	3.9	Equipment Used	5
	3.10	Quality Assurance	6
4.0	OBSE	RVATIONS AND RECOMMENDATIONS	7
	4.1	Water Damage and Limited Visual Fungal Growth Evaluation	7
	4.2	Facility/Building HVAC System	7
	4.3	Safety Training and Record Keeping	7
	4.4	Safety Walk-Through	7
5.0	SAMP	PLING RESULTS	
	5.1	Air Monitoring – Carbon Monoxide	8
	5.2	Breathing Zone Air Sampling	8
	5.3	Lead Wipe Sampling	8
	5.4	Painted Surface Evaluation	10
	5.5	Indoor Air Quality	10
	5.6	Illumination Level Monitoring	10
	5.7	Exhaust Ventilation Survey	11
	5.8	Personal Noise Dosimetry & Sound-Level Measurements	11
6.0		JECT LIMITATIONS	
7.0	PROJ	JECT APPROVAL	13

IHSAV Sidney IFR (Converted) Sidney, Montana ti.

NES, Inc. NES Job Number: 013.1H1449.12

Posted to NGB FOIA Reading Room May, 2018

Appendices:

Appendix A	References
Appendix B	Assessment Criteria
Appendix C	Photo Log
Appendix D	Chemical Inventory
Appendix E	Floor Plan/Illumination Survey/IAQ - Temp, RH, CO & CO2
Appendix F	Ventilation Data
Appendix G	Field Notes
Appendix H	Calibration Certificates
Appendix I	Analytical Results
Appendix J	Laboratory Reports
Appendix K	Employee List
Appendix L	IHSW Violation Inventory Log
Appendix M	Hazard Assessments
Appendix N	Recommendations
Appendix O	DD Forms 2214
Appendix P	Installation Status Report
Appendix Q	Facility Information
Appendix R	Safety Related Information
Appendix S	Noise Dosimetry Data
Appendix T	Additional Supporting Information

IHSAV Sidney IFR (Converted) Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018

NES, Inc. NES Job Number: 013.IH1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1801 of 1990

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

SIDNEY INDOOR FIRING RANGE (CONVERTED) 2190 West Holly Street Sidney, Montana 59270

October 30, 2013

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1449.12

Non-Responsive

Non-Responsive

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1802 of 1990

EXECUTIVE SUMMARY

On October 30, 2013, Certified Industrial Hygienist (CIH), of Network Environmental Systems, Inc. (*NES*), conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Sidney Indoor Firing Range (IFR) facility, located at 2190 West Holly Street in Sidney, Montana. The primary point of contact (POC) for information gathered during this survey was **Non-Responsive** who may be reached by phone at (406) 324-5485 or by email at **Non-Responsive**

The objectives of this IHSAV were to perform the following activities:

- Evaluate work processes conducted within the facility;
- Collect metal surface wipe samples;
- · Perform an assessment & inspection of the converted IFR;
- · Measure illumination levels;
- Collect indoor air quality data;
- · Evaluate existing safety hazards; and
- Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables Non-Responsive as very helpful with providing critical information during this IHSAV.

IHSAV Sidney IFR (Converted) Stdney, Moniana Posted to NGB FOIA Reading Room May, 2018 Page 1 of 12

NES. Inc. NES Job Number: 013.IH1449.12

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1803 of 1990

1.0 INTRODUCTION

On October 30, 2013. CIH, of *NES*, conducted an IHSAV at the Sidney IFR facility, located at 2190 West Holly Street in Sidney, Montana. The primary POC for information gathered during this survey was **Non-Responsive** who may be reached by phone at (406) 324-5485 or by email at **Non-Responsive**

1.1 Objectives

The primary objective of the IHSAV was to conduct hazard evaluations of work processes and asses the IFR. Processes and activities at the facilities were evaluated and recommendations to control the existence and extent of potentially hazardous operations or conditions at the Army National Guard (ARNG) facility were documented accordingly (Reference Appendix M – Hazard Assessments). This IHSAV will serve to establish a baseline.Hazard Assessments (HA) / Job Safety Analysis (JSA) of workplace and process conditions or update/validate a previous HA/JSA so a worker's history of exposures, or potential exposures is provided for each civilian and military employee.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- · Evaluate work processes conducted within the facility;
- Collect metal surface wipe samples;
- Perform an assessment & inspection of the converted IFR;
- Measure illumination levels;
- Collect indoor air quality data;
- Evaluate existing safety hazards; and
- Review safety policies/programs, training, and record keeping.

IHSAV Sidney IFR (Conversed) Sidney, Montana Page 2 of 13

NES. Inc. NES Job Number: 013.IH1449.12

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1804 of 1990

2.0 PROCESS DESCRIPTION

The Sidney Armory/ IFR combination facility currently has twenty-six (26) full time guard members performing administrative and maintenance activities. The primary unit assigned to this facility is Detachment 1 of the 260th Engineer Support Company. The facility has offices used for administrative and recruiting purposes, a converted indoor firing range (IFR) located in the facility's basement, a drill floor, storage rooms, a training room, a supply room, bathrooms and a kitchen. The facility operates weekdays, Monday thru Friday, from 0800 to 1700. The facility is not currently rented out for civilian activities. The primary work activities performed at this facility are administrative duties and facilitating drills for M-day soldiers. A copy of the employee list is provided in Appendix K.

The IFR had been closed in 1997 due to insufficient ventilation. It was then converted into a gym area for facility personnel after the previously sand floors were sealed with concrete. The ceiling consists of exposed iron trusses and the walls have been repainted. Documentation of repurposing was not available during the IHSAV, and personnel had indicated the IFR was not cleaned prior to conversion. Lead wipe sampling was performed during this IHSAV in order to determine if adequate cleaning of the IFR had been completed.

NES was not provided and did not find records or documentation of any previous IHSAVs that had been conducted at the facility.

IHSAV Sidney IFR (Converted) Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018

Page 3 of 13

NES. Inc. NES Job Number: 013.1H1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1805 of 1990

3.0 METHODS

3.1 Air Monitoring – Carbon Monoxide

Air monitoring for carbon monoxide (CO) was performed throughout the facility using a TSI QTrak Meter, model \$551. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.2 Breathing Zone Air Sampling

Personal breathing zone air sampling was not conducted during the ISHAV.

3.3 Lead Wipe Sampling

Lead wipe samples were collected from horizontal work and floor surfaces in various locations throughout the facility. Ghost WipeTM brand wipes were used by wiping a one (1) square foot (ft²) area. The collected wipe samples were placed in clean and labeled plastic centrifuge tubes and promptly sealed upon collection. Sampling personnel donned a clean pair of Nitrile gloves for each sample collected. Samples were submitted to ALS Environmental Laboratory, located in Salt Lake City, Utah, to be analyzed for lead in accordance with NIOSH Method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust. See Appendix I for a summary of sample results and Appendix J for laboratory reports.

3.4 Painted Surface Evaluation

The interior of the converted IFR was visually inspected for peeling paint on the walls and ceilings. All samples, if collected, were submitted to ALS Environmental Laboratory, located in Salt Lake City, Utah to be analyzed for lead in accordance with NIOSH Method 7300 modified method.

3.5 Indoor Air Quality

Carbon dioxide (CO₂), temperature, and relative humidity were measured using a TSI QTrak Meter, model 8551. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. Human occupants produce CO₂, water vapor, and other bio effluents. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, *Ventilation for Acceptable Air Quality*, recommend maintaining CO₂ below a concentration that is 700 parts per million (ppm) above

IHSAV Sidney IFR (Converted) Sidney, Montana Page 4 of 13

NES, Inc. NES Job Number: 013.1H1449.12

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1806 of 1990 outdoor levels. Outside CO₂ concentrations are typically about 350 ppm. Providing sufficient ventilation to maintain steady-state CO₂ concentrations at this level will assure that a substantial majority of people entering a space will be satisfied with respect to human bio effluents (body odors). A copy of the current annual calibration certificate for this instrument is located in Appendix H.

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the facility using a Konica Minolta Light Meter, Model TL-1. Measurements in office areas were taken at typical work locations, such as the tops of desks and near workstations. To provide information on the overall lighting conditions in the remainder of the facility, measurements were taken from the surfaces of typical work locations and at waist level from selected locations. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.7 Exhaust Ventilation Survey

Air velocity and flow measurements were not collected during this IHSAV as no active ventilation systems were present.

3.8 Personal Noise Dosimetry & Sound-Level Measurements

Personal noise dosimetry and sound-level measurements were not collected during this IHSAV as no hazardous noise sources were identified.

3.9 Equipment Used

The following equipment was used for this survey:

Туре	Model Number	Serial Number	Calibration Date
TSI QTrak Meter	8551	54110546	October 2013
Konica Minolta Light Meter	TL-1	279019	May 2013

Please see Appendix H for a complete inventory of calibration certificates of equipment used during this IHSAV.

Page 5 of 13

NES, Inc. NES Job Number: 013.1111449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1807 of 1990

Posted to NGB FOIA Reading Room May, 2018

3.10 Quality Assurance

NES employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs and;
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

IHSAV Sidney IFR (Converted) Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018 Page 6 of 13

NES. Inc. NES Job Number: 013.IH1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1808 of 1990

4.0 OBSERVATIONS AND RECOMMENDATIONS

4.1 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the converted IFR was visually inspected for water damage and subsequent fungal growth resulting from moisture. The converted IFR has had water intrusion occur in the winter months, according to the POC. Water stains were observed on the side walls. There were no visual signs of fungal growth in the converted IFR.

4.2 Facility/Building HVAC System

An evaluation of the heating, ventilation, and air-conditioning HVAC systems that serve the facility was conducted. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system. The facility HVAC systems were in good visible condition. No exposed hazards or defects were observed during the IHSAV. The HVAC system helps to provide the facility with proper indoor air quality (IAQ); temperature, humidity and CO₂ levels. A central HVAC system is used in the office areas.

4.3 Safety Training and Record Keeping

A cursory inspection of the facility's written health and safety programs and training documentation was performed to determine if the site specific programs and annual documentation was current. The following training documentation was found at the site:

- Emergency Preparedness Program (last completed training in 2011)

Written programs were missing for Hazard Communication, Hearing Protection, Personal Protective Equipment (PPE), and Respiratory Protection.

Note: *NES* evaluated the documents to verify their presence and implementation. *NES* did not evaluate the contents or quality of any of the documents identified during this visit.

4.4 Safety Walk-Through

NES conducted a walk-through of the facility to identify existing conditions and whether safety hazards or deficiencies were present.

1. The facility housekeeping was very good.

2. Fire extinguishers were current for monthly and annual inspections.

IHSAV Sidney IFR (Converted) Sidney, Montana Page 7 of 13

NES, Inc. NES Job Number: 013.1H1449.12

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1809 of 1990

5.0 SAMPLING RESULTS

5.1 Air Monitoring - Carbon Monoxide

Carbon monoxide (CO) concentrations were measured at a total of six (6) locations throughout the facility using a TSI QTrak Meter, model 8551. The concentrations of CO ranged from 1 to 2 ppm. These concentrations are below the exposure limit ceiling of 200 ppm set forth by NIOSH. A summary of CO measurements collected is provided in Appendix E.

5.2 Breathing Zone Air Sampling

Personal breathing zone air sampling was not conducted during the ISHAV.

5.3 Lead Wipe Sampling

Wipe samples for lead dust were collected from horizontal surfaces in selected representative areas of the facility to determine if housekeeping efforts have been successful. The US Department of Housing and Urban Development (HUD) recommends 40 micrograms per square foot ($\mu g/ft^2$) as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not expected to be used by the public are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 $\mu g/ft^2$ is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays and tool rooms, which are not routinely accessible to the general public.

A total of fifteen (15) Ghost Wipe[™] lead wipe samples were collected during the IHSAV to be analyzed in accordance with NIOSH Method 7300, modified for Ghost Wipes[™]. Five (5) of the samples were collected from the center and four corners of the drill floor. Nine (9) samples were collected from the converted indoor firing range. The remaining sample was collected from the kitchen countertop. The analytical results are summarized in the table below. Laboratory results are attached in Appendix J.

IHSAV Sidney IFR (Converted) Sidney, Montana Page 8 of 13

NES, Inc. NES Job Number: 013.1111449.12

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1810 of 1990

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG/HUI Standard
103013-2190-01	Converted IFR	Firing line, middle lane, floor	390	\leq 40 µg/ft ²
103013-2190-02	Converted IFR	Midrange, floor	240	\leq 40 µg/ft ²
103013-2190-03	Converted IFR	Bullet trap area, floor	92	\leq 40 µg/ft ²
103013-2190 <mark>-</mark> 04	Converted IFR	Stucco wall at southwest end	180	\leq 40 µg/ft ²
103013-2190-05	Converted IFR	HVAC duct near bullet trap area	5,400	\leq 40 µg/ft ²
103013-2 <mark>1</mark> 90-06	Converted IFR	Painted ceiling truss at south end (horizontal surface)	130,000	\leq 40 µg/ft ²
103013-2190-07	Converted IFR	Painted ceiling truss at north end (horizontal surface)	81,000	\leq 40 µg/ft ²
103013-2190-08	Converted IFR	Concrete wall at northcast end	19	\leq 40 µg/ft ²
103013-2190-09	Converted IFR	Handrail leading to converted IFR	9.5	\leq 40 µg/ft ²
103013-2190-10	Drill Floor	Northeast corner, floor	6.9	\leq 40 μ g/ft ²
103013-2190-11	Drill Floor	Northwest corner, floor	8.4	\leq 40 µg/ft ²
103013-2190-12	Drill Floor	Center, floor	2.3	\leq 40 µg/ft ²
103013-2190-13	Drill Floor	Southeast corner, floor	< 1.3	\leq 40 µg/ft ²
103013-2190-14	Drill Floor	Southwest corner, floor	14	\leq 40 µg/ft ²
103013-2190-15	Kitchen	Countertop	3.5	\leq 40 µg/ft ²

Table 1: Summary of Lead Wipe Sample Results

Bold = Denotes sample results were greater than the allowable level set by ARNG

Analytical results for samples which exceed the acceptable concentration are shown in bold. The analytical results indicate acceptable concentrations in the areas sampled, except for the converted IFR ceiling and floor samples. These locations should be cleaned to remove excess lead contamination. The Armory SOP for lead cleanup is provided in Appendix R (Safety Related Information).

IHSAV Sidney IFR (Converted) Sidney. Montana

Posted to NGB FOIA Reading Room May, 2018 Page 9 of 13

NES, Inc. NES Job Number: 013.1H1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1811 of 1990

5.4 Painted Surface Evaluation

Peeling paint was not identified during the IHSAV.

5.5 Indoor Air Quality

The facility has methods and engineering controls in place to provide adequate IAQ. General dilution ventilation is provided throughout most areas within the facility. The facility HVAC system is able to provide the general dilution by removing indoor contaminants and displacing them outdoors. Also the HVAC system is able to provide temperature controls, relative humidity controls and air cleaning. The average outdoor carbon dioxide concentration was measured to be 365 parts per million (ppm); therefore, the maximum indoor CO2 concentration recommended by ASHRAE would be 1,065 ppm. The CO2 concentrations from the locations measured inside the facility ranged between 709 and 861 ppm, within the ASHRAE recommended concentration. ASHRAE recommends maintaining temperatures between 68 and 75°F and relative humidity between 30% and 60% relative humidity to minimize the growth of allergenic or pathogenic organisms. Temperatures inside the building ranged between 62 and 67°F. Relative humidity ranged from 33 to 36%. The rooms measured were within the ASHRAE recommended ranges for relative humidity. Temperatures throughout the facility were measured to be below the recommended range, but no personnel had reported discomfort. A table of the sample locations and corresponding IAQ measurements is available in Appendix E.

5.6 Illumination Level Monitoring

Illumination levels were measured throughout the facility. Measurements were collected in foot-candles (FC). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or workbench were taken at waist level. The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 FC is the minimum lighting requirements for the performance of tasks where reading is required, 30 FC is required for work areas where reading is not required, 10 FC is required for non-work areas, such as aisles and corridors, and 5 FC is required for walking surfaces, such as mechanical spaces.

IHSAV Sidney IFR (Converted) Sidney, Montana Page 10 of 13

NES, Inc. NES Job Number: 013.1H1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1812 of 1990

Posted to NGB FOIA Reading Room May, 2018

Lighting in the drill hall ranged from 59 to 100 FC. Illumination was measured from a total of six (6) locations. The locations measured during this IHSAV met the corresponding illumination criteria. See Appendix E for a table of illumination measurements and locations.

5.7 Exhaust Ventilation Survey

Air velocity and flow measurements were not collected during this IHSAV as no active ventilation systems were present.

5.8 Personal Noise Dosimetry & Sound-Level Measurements

Personal noise dosimetry and sound-level measurements were not collected during this IHSAV as no hazardous noise sources were identified.

IHSAV Sidney IFR (Converted) Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018

Page 11 of 13

NES, Inc. NES Job Number: 013.1H1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1813 of 1990

6.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, *NES*^{*} professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. *NES* assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of *NES*, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since *NES* is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

IHSAV Sidney IFR (Converted) Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018

NES, Inc. NES Job Number: 013.1H1449.12

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1814 of 1990



Non-Responsive

January	3,	2014
Date		

January 10, 2014 Date

Industrial Hygiene Program Manager

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **NON-Responsive** for the Southwest Regional Industrial Hygiene Office, 916-804-1707. Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

IIISAV Sidney IFR (Converted) Sidney, Moniana Page 13 of 13

NES. Inc. NES Job Number: 013.1111449.12

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1815 of 1990

Appendix A

References

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment

AR 40-5, Preventative Medicine

- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process
- AR 385-10, The Army Safety Program
- Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

TB MED 503, The Army Industrial Hygiene Program

- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

Appendix B

Assessment Criteria

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Occupational Exposure Limit

Posted to NGB FOIA Reading Room May, 2018

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).

Page 1 of 1

.12

Print Inventory

Print Inventory Cancel

Unit: DET 1 260th HORIZ ENG Storage: FLAM CO CAB					Month 10/1/2013			
SLN	Item	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
	Antifreeze	6850-01-464-9125	Old World Industries Inc.		3	Gallons		
	Grease	9150-01-197-7693	Summit Lubricants Inc.	20	10	14 Ounces		
	Hydraulic Fluid	9150-00-698-2382	Radco Industries Inc.		3	Quarts [']		
-	OE/HDO-10	9150-01-496-1946	Safety-Kleen Systems Inc.		5	Gallons		
	OE/HDO-15 \40	9150-01-421-1427	Safety-Kleen Sytems Inc.		20	Quarts		
			121700000000000000000000000000000000000					

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 10/23/2013 Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1819 of 1990

,12

Print Inventory

Print Inventory Cancel

Jnit: DET 1 260th HORIZ ENG			Stora JANITC		Month 1/1/2013			
SLN	Item	NSN	Manufacturer		Quantity	Unit of Issue	Shelf Life	нсс
Desc	CLEANING COMPOUND, WINDSHIELD ription: SHELF LIFE: 24 MONTHS	6850-00-926-2275	LIGHTHOUSE FOR THE BLIND THE	CPYJQ	3	ËA		F2
esc	GLASS CLEANER	7930-00-901-2088 SHELF LIFE	LIGHTHOUSE FOR THE BLIND OF HOUSTON	ndro- 48 945	2	EA		
	ABSORBENT MATERIAL,OIL AND WATER	7930-00-269-1272	FEDERAL SPECIFICATIONS	BDRLP	o	co		
	AJAX QUICK SOL	7930-01-F01-6389	COLGATE PALMOLIVE	BKGKS	4	QT		
-	BETCO FLOOR SEALER		BETCO		4	GL		
- 55	BETCO HI TECH FINISH		BETCO		5	GL		
	BETCO PUSH		BETCO		4	QT		
	BETCO SURE CURE SEALER		BETCO		3	GL		
	BETCO TOILET BOWL CLEANER		NATIONAL LABORTORIES	BDLHV	3	QT		c
	CLEANING COMPOUND, SOLVENT, SIMPLE GREEN	7930-01-342-5316	SUNSHINE MAKERS INC.	GPYLC	1	SGL	1	
	DETERGENT, GENERAL PURPOSE	7930-01-436-8000	ROCHESTER MIDLAND	CFDNK	o	GL		

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 1/14/2013

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1820 of 1990

.12

Description: BUFFERALL CLEANER/NEUTRALIZER, SHELF LIFE: 36 MONTHS

						and the second se	
-	DETERGENT,GENERAL PURPOSE Description: 36MONTH SHELF LIFE	7930-00-926-5280	LHB	CGNHK	0	EA	
	rescription: sonon in ones en e						1211111111
-	FLOOR GLOSS RESTORER, SPRAY BUFF	7930-01-380-8419	SPARTAN CHEMICAL COMPANY, INC.	CYFRH	1	CN 5GL	٧5
1	Description: SHELF LIFE: 24 MONTHS						
3	GLASS CLEANER,ANTIFOGGING	7930-01-326-8110	LIGHTHOUSE FOR THE BLIND OF HOUSTON	BZNMD	2	16 OZ	
	Description: SHELF LIFE: 36 MONTHS						
	HORIZON 100	7930-00-N01-8106	JOHNSON WAX	BLXRZ	3	GL .	N1
*	HORIZON 400	7930-00-F03-8657	JOHNSON WAX	BWVMD	0	GL	N1
	LIME-SOL		ROCHESTER MIDLAND		o	QT	
	MASTERPIECE WAX STRIPPER	7930-00-F02-5521	RECKITT&COLMAN	BPSPK	O	GL	
	MONTANA DELUXE	LP	MONTANA BRUSH AND BRROM		1	GL	
	REOWN SPECIAL GLASS CLEANER		AMSAN		2	GL	
	SOAP LIQUID HAND	8520-00-228-0598	DBA LHB		1	GL	
	Description: SHELF LIFE 24 MONTH	HS					
	WAX POLISH		CLASSIC SHINE		1	170Z	
	A-125 DRY	6840-01-313-1901	DBA ECOLAB SERVICES GROU	р Срэтс	1	CN	В
	MATALIST 20 FLOOR FINISH	7930-01-131-5648	RECKITT AND COLMAN INC	СНСВТ	2	GL	

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 1/14/2013

Posted to NGB FOIA Reading Room May, 2018

ials Inverses Available: doint Invento

Page 3 of 3

.12

Description: 24 MONTH SHELF LIFE

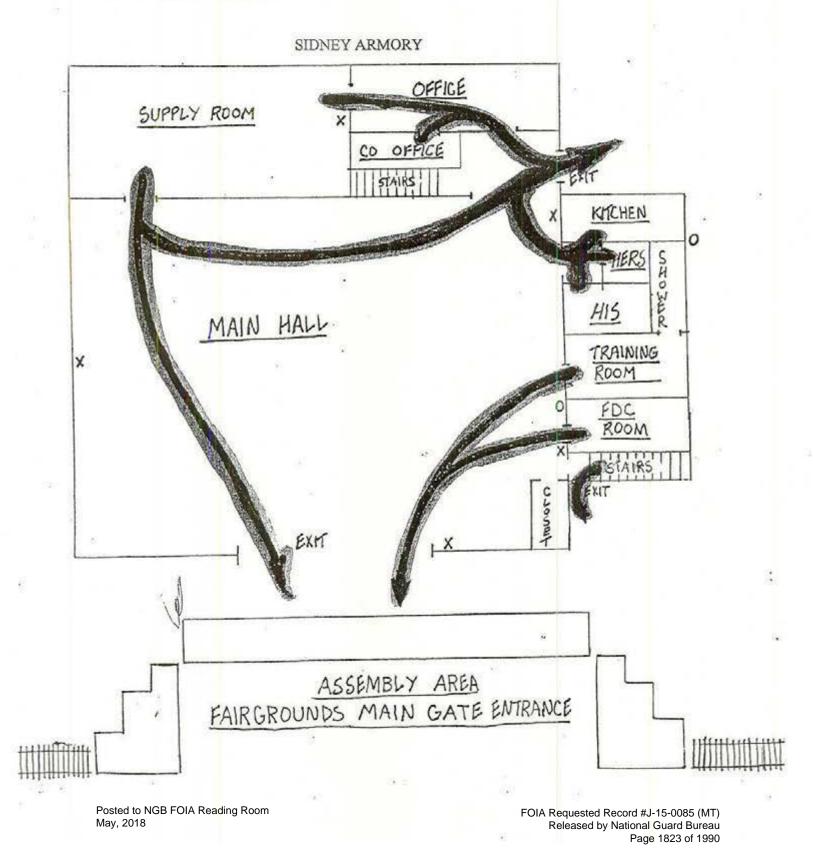
METALIST PENETRATING WAX STRIPPER 1	7930-00-F02-5521	RECKITT BENCKISER	BWTHZ	0	GL	
METALIST SBR 200 BUFF RESTORE 5	7930-00-N02-5479	RECKITT BENCKISER	BMPPL	0	GL	· N1
 POWER TIME	7930-01-436-8045	ROCHESTER MIDLAND	CFDNN	6	GL	
SPRAY NINE CLEANER	7930-01-393-6747	SPRAY NINE CORPORATION		4	24 OZ BBOTTLE	

http://ngmtenviromental:8087/mt_env_hmi/HMI/printInventory.asp?site=HMI&main=14... 1/14/2013

@1Z

ANNEX A (Drawing of facility) for DET 1 BTRY B 1-190TH FA BN

- 1. Arrows denote evacuation routes.
- 2. "X" indicates fire extinguishers.
- 3. "O" indicates water outlet.



IAQ MEASUREMENTS SIDNEY IFR (CONVERTED) SIDNEY, MT 30 OCTOBER 2013

Location	CO ₂ max permissible level 1,065 ppm	Temperature permissible range 68 - 75°F	RH% permissible range 30-60%	CO Max permissible 200 ppm STEL
Outside Control	365	34.1	28.5	2
Drill Floor	803	64.3	34.7	1
Drill Floor	783	64.1	34.6	1
Kitchen	709	61.7	33.2	1
Office	861	66.9	34.2	1
Converted IFR	798	66.4	35.2	1
Men's Restroom	816	65.3	35.6	1

BOLD = Outside of permissible range CO₂ = Carbon Dioxide CO = Carbon Monoxide

°F = Fahrenheit

RH = Relative Humidity

ILLUMINATION SURVEY SIDNEY IFR (CONVERTED) SIDNEY, MT 30 OCTOBER 2013

Room	Location	Light Measurement (FC)	Minimum Lighting Requirement (FC)
Drill Floor	North End	58.9	≥ 30
Drill Floor	South End	100	≥ 30
Kitchen	Center of room	52	≥ 30
Office	Desktop	86	≥ 50
Converted IFR	Firing Line	78	≥ 10
Men's Restroom	Center of room	55	≥ 10

*FC = foot candle measurement Bold = Insufficient Lighting

10 Sa M mou 0 C DIST aure used concern about lack adequale unt. CI wes Sa closed ns. Instant Accors 2 ppin 15 the culturg (T.M 1 0 exis an 5 bace Ci. 2 000 CAL Concer OD ENVICO 8 LUCY DOC ives ore shut 000, Sin 11 an no 100 recal concrete 50 in place Y. V MI Conuck 00r. V was nox uj on (red N 12 61 e.c 6500 00 al! C open eil inoucd Uj 10c 45 10 V remains). usses t CAUE 11 lin inte-ville anp ed. OUIC C Becu cleand NOT l F BEST AVAILABLE COPY Posted to NGB FOIA Reading Room FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau May, 2018

Page 1826 of 1990

BEST AVAILABLE COPY .12 Sidney Closed IFR Present Condition side brend on the wal Jaler stains C Acods ice the winter. 60 OSC noise No ac 25 acua O expo Deusonv 2 1.00 on-Responsive 18.00

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1827 of 1990

Sidney - Closed IFR CCIF Z).12 mox-03 100 -OL Fini Live-Middle / une avea -02 Cauck for 1-02 md Raye -03 Course floor ai Julkt trop al straye Stuco Wall 04 Wend of range 1.08 abj. typulkt trap X-01 -05 HUAC dust of Bullet hiks, at form bullet trap cho of Ringe Black painked cally truss at SO. and of Ruge 1/4 A. -07 House Black poinkel anetal callin truss= 1/4 A at No. end of Ruge -08 Concrete Wall 09 Mandroil Down to the basement (FR

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1828 of 1990

BEST AVAILABLE COPY 012 Sidney Armory offic 0ĵ *15 Hitchen 13 X -Drill Floor PR X-12 RF TIOND 1) DC X-10 V 77 τ sto CIFR VE TAC . 00 sample re-1.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1829 of 1990

-12 clevents of the old firing raye have removed, al Expirition sys provides heat only - tullet hoks obsaired in the Dasa range aut Oufsile use Chent fractite) = None Converted used for 3 - 9 f w - no wapay are cleared in 7 - presently area is not well the 17 - we pour air clience on the Amoy Dill the No proof of IFR Convision was available Fire extinguister present in CIFR, J'inspected mouthly. House Keeping in armany + CIFR Was very good.

Posted to NGB FOIA Reading Room May, 2018

1	VES.	Facility: Collecte	Sampling Sun Signey, A d By:_NON-Revised: September Revised: September	ar (II espons 30 - 1		,12	
	Sample Informati	on		Sam			yte(s)
1	Sample Number:	103013-	2190-0	1 11	10	2, 1	0
	Sample Location:		-Center	1	Itt	Lead	ζ
2	Sample Number:		2190-02	2 1	1	1	
-	Sample Location:	1	100				
3	Sample Number:	103013-	2190-03	3 /			
	Sample Location:	Faratbe	allet Trap				
4	Sample Number:	103013-2	2190-04	1			- 11
<u> </u>	Sample Location:	Wall 5/6) end				
5	Sample Number:	1030/3-2	2190-05				
<u> </u>	Sample Location:	HVAC ded	- So. cul ray	c			
6	Sample Number:	103013-2	2190-0E	5 1/1	SKI		
-	Sample Location:	Trass So	End of Raya	14	174		
7	Sample Number:	103013-2	2190-07	z 1/. (2		
1	Sample Location:	Truss No	Ed of Bur	× 144			
8	Sample Number:	10303-2	190-08	10	Z		
	Sample Location:	Locher [)005, No. a.d	Itr			0.000
9	Sample Number:		2/90 - 09				
_	Sample Location:	Hand rail +	o barnant IF	PN			
10	Sample Number:	PBORPH	21960 0416	3 100			2
-	Sample Location:	100-	Vin	X		(1/	
11	Sample Number:		190-10		N	V V	C
-	Sample Location:	Dill floc	r Sec. che	-p	V	Licio	<i>У</i>
12	Sample Number:	1030/3-2	190-11	<u> </u>		1	5
	Sample Location:	Dill Ha	ooSee n	9)			
3	Sample Number: Sample Location:	103013-21 Duill Flo	90-12 00/-Scen	-61		N	

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1831 of 1990

103013-2190-13 m/Sec.Map) Drill Floor 103013-2190-14 (") Drill Floor 103013-2190-15 (") 103013-2190-15 (") Kitchen conne-top Kitchen conne-top

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1832 of 1990

Lach

21



Facility: Simey MT Armey + CIFR, 12 Date: 10Revised: September 18, 2013



Location	CO: max permissible level 1,000 ppm	Temperature permissible range 68 - 75° F	RH% permissible range 30-60%	CO max permissible range 200 ppm. STEL	Illumination (FC)
Dvill Floor	803	64.3	34-7	1	58.9
Drill Floor	783	6401	34.6	1	100
Kitchen	709	61.7	33. Z	1	52
office	861	66.a	34.2	1	86 Ask
Outside	565	34, 1	285	S	
CIFR	798	66-4	35.2	1	at firmy li
lest Roam	516	65.3	35.6	1	55
,				4	

CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL = Short Term Exposure Limit

NES	BEST AVAILABLE COPY Facility Information Form Revised: September 19, 2013
Gener Non-Respo	Date(s) of Previous IHSAVs: None
IH(s):	Date(s) of IHSAV: 027. 30, 13
Facility Name:	mory W/ Rasement (Closed IFR)
Address: Z/	70 West Holly Street, Sidney, MT 59270
Facility Commande Safety Officer:	lon-Responsive
No Person(s): 27 Unit(s): Det 1	Admin: <u>Maint:</u> <u>Work Sched:</u> <u>Saw-Spr</u> Facility: <u>Str</u> 260 th <u>Eyrineer SupP</u> Co-Tenant(s): <u>Wonc</u> Include UIC if available
Primary work Adur activities at Facility:	in, Training, support for M-Day Side

Written Health & Safety Programs / SOPs

Program	Program Needed	Have Program	Date of Last Training	# Enrolled	Comments
Bloodborne Pathogen	~				
Confined Space					No Confined Space
Emergency Preparedness		/	2011	30	
Hazard Communication	/				Not Adailable
Hearing Protection	/				Plugs avail, no writtenpos
Lock Out / Tag Out					None Required
PPE	/				
Respiratory Protection	-				
Vision	-				Visisian tester through mil
Y = Yes N = No NA Occuments / Records to Facility floor plan / List of equipment s Previous IH report NA = Not Applicable to U	evacuation serviced / mass $- Na$	map aintained	, 1	Hazardous Personnel li Others (List	

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1834 of 1990



MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 530-268-1860

Certificate of Calibration

Date: Oct 10, 2013

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

MPC Control #:	CD3921
Asset ID:	1245
Gage Type:	IAQ METER W/PROBE
Manufacturer:	TSI
Model Number:	8551
Size:	N/A
Temp/RH:	68.8°F/34.5%

Calibration Notes:

Work Order #.

SAC-70062158

Cert No. 220081202166631

Serial Number: Department: Performed By: Received Condition: Returned Condition: IN TOLERANCE Cal. Date: Cal. Interval: Cal. Due Date:

51380

N/A

IN TOLERANCE October 10, 2013 12 MONTHS October 10, 2014

Standards Used to Calibrate Equipment

1.D.	Description.	Model	Serial	Manufacturer	Cal. Due Date	Traceability #
AV2338 AV5000	GAS TEST KIT ENVIRONMENTAL CHAMBER	58L-400 BTX-475	BAL-400-2 0612421	GASCO AFFILIATES LLC ESPEC	Nov 1, 2013 Nov 26, 2013	914776 2008120224653
100000	ENVIRONMENTAL CHAMBER	BTX-475	0612421	ESPEC	NOV 26, 2013	20001202240.

Procedures Used in this Event

Procedure Name	Description
MANUFACTURER	MANUAL REV CONTROL

Calibrating Technician:



QC Approval:



The recorded expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the overage factor k=2, which for normal distribution corresponds to a coverage probability of approximately 95%. The standard uncertainty of measurement has been determined in accordance with EA's Publication and NIGT Technical Note 1207, 1964 Edition. Services rendemed with ISO 17025-2005, ISO 5001:2008, ANSI/NCSL 2540-1, MPC Quality Manual, MPC CSD and with customer purchase order instructions.

Collibration bycles and resulting sue dates were submitted approved by the customer. Any number of factors may cause an instrument to drit out of tolerance before the next scheduled calibration. Recellibration cycles should be based on frequency of use, environmental conditions and customer's astabilished systematic accuracy. The information on this report, pertains only to the instrument in an environmental conditions and customer's astabilished systematic accuracy. identified.

All standards are traceable to SI Buough the National Institute of Otmobine and Technology (NIST) and/or recognited national or International standards laboratories. Services rendered include procer minufacturer's service instruction and are warranted for no less than thirty (30) days. This report may not be reproduced in part or in a whole without the prior written approval of the issuing MPC lab. (CERT, Rev 3)

Page 1 of 1

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1835 of 1990



Certificate of Calibration Entra Control Control

7323005 Certificate Page 1 of 2

Instrument Identification

PO Number

Company ID: 607229

AVE 0510 SUPERF OK I SUITE C MATHER, CA 95655

Instrument ID: 00279019 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 00279019

Certificate Information

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: LEFT AS FOUND Procedure: 33K4-4-564-1 ILLUMINANCE LIGHT METER

Technician: Cal Date 02May2013 Cal Due Date: 02May2014 MONTHS Interval: 12 Temperature: 23.0 C Humidity: 47.0 %

Remarks:

Tektronix certifies the performance of the above instrument has been verified using test equipment of known accuracy, which is traceable to National Metrology Institutes (NIST, NPL, PTB) that are linked to the International System of Units (SI). The policies and procedures used comply with ANSI/NCSL Z540.1-1994 (R2002).

This certificate shall not be reproduced, except in full, without the written permission of Tektronix.

Approved By: Service Represe

Calibration Standards

Inst. ID#	Description	Manufacturer	Model	Cal Date	Date Due
17-1001076	6 STEEL RULE	STARETT	C416R-72	22Mar2013	22Mar2015
17-1001081	LUMINANCE STD	OPTRONIC LABS	OL 455-4	31Jul2012	31Jul2013
17-2007750	1000W LIGHT BULB	GOOCH HOUSEGO	OL FEL-P-K	30Jan2013	30Jan201/
4083RC	MULTIMETER	FLUKE	5842A	06Aug2012	28Aug2011
2 4 4	17-1001076 17-1001081 17-2007750 1083RC	17-1001076 8 STEEL RULE 17-1001081 LUMINANCE STD 17-2007750 1000W LIGHT BULB	IT-1001076 0 STEEL RULE STARETT IT-1001081 LUMINANCE STD OPTRONIC LABS IT-2007750 1000W LIGHT BULB GOOCH HOUSEGO M083RC MULTIMETER FLUKE	17-1001076 0 STEEL RULE STARETT C416R-72 17-1001081 LUMINANCE STD OPTRONIC LABS OL 455-4 17-2007750 1000W LIGHT BULB GOOCH HOUSEGO OL FEL-P-K 1083RC MULTIMETER FLUKE 8842A	17-1001076 6 STEEL RULE STARETT C416R-72 22Mar2013 17-1001081 LUMINANCE STD OPTRONIC LABS OL 455-4 31Jul2012 17-2007750 1000W LIGHT BULB GOOCH HOUSEGO OL FEL-P-K 30Jan2013 1083RC MULTIMETER FLUKE 8842A 06Aug2012

6120 Hanging Moss Road • Orlando, FL 32807 • Phone: 800-438-8165 • Fax: 407-678-4854

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1836 of 1990

TABLE 1 LEAD WIPE SAMPLE RESULTS SIDNEY IFR (CONVERTED) SIDNEY, MT 30 OCTOBER 2013

Sample Number	nple Number Sample Area		Results (µg/ft ²)	ARNG Standard (µg/ft ²)	
103013-2190-01	Converted IFR	Firing line, middle lane, floor	390	<u>≤</u> 40	
103013-2190-02	Converted IFR	Midrange, floor	240	<u>≤</u> 40	
103013-2190-03	Converted IFR	Bullet trap area, floor	92	<mark>≤</mark> 40	
103013-2190-04	Converted IFR	Stucco wall at southwest end	180	≤ 40	
103013-2190-05	Converted IFR	HVAC duct near bullet trap area	5,400	<u>≤</u> 40	
103013-2190-06	Converted IFR	Painted ceiling truss at south end (horizontal surface)	130,000	<u>≤</u> 40	
103013-2190-07	Converted IFR	Painted ceiling truss at north end (horizontal surface)	81,000	<u>≤</u> 40	
103013-2190-08	103013-2190-08 Converted IFR Concrete		19	≤ 40	
103013-2190-09	Converted IFR	Handrail leading to converted IFR	9.5	≤40	
103013-2190-10	Drill Floor	Northeast corner, floor	6.9	≤40	
103013-2190-11	Drill Floor	Northwest corner, floor	8.4	≤ 40	
103013-2190-12	Drill Floor	Center, floor	2.3	≤ 40	
103013-2190-13	103013-2190-13 Drill Floor Southeast corner, fl		< 1.3	≤40	
103013-2190-14	Drill Floor	Southwest corner, floor	14	<u>≤</u> 40	
103013-2190-15	Kitchen	Countertop	3.5	<u>≤</u> 40	

μg/ft² = micrograms per square foot ARNG = Army National Guard Bold = Above ARNG Standard limit .



Report Date: December 02, 2013

Von-Responsive

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630 Phone: (916) 353-2370 x 20 Fax: (916) 353-2375

Non-Responsive

Workorder: 34-1332433 Client Project ID: 013.IH1449.12/Sidney, MT Purchase Order: 013.IH1449.12 Project Manager: NOn-Responsive

Sample ID: 103013-2190-01	Received: 11/20/2013			
Lab ID: 1332433001 Sampling Location: Sidney, MT				
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²		Prepared: 11/26/2013 Analyzed: 11/27/2013	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	390	390	1.3	

Sample ID: 103013-2190-02				Received: 11/20/2013
Lab ID: 1332433002	Sampli			
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/27/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	240	240	1.3	

Sample ID: 103013-2190-03				Received: 11/20/2013
Lab ID: 1332433003	Sampli	ng Location: Sid	dney, MT	in the second
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²		Prepared: 11/26/2013 Analyzed: 11/27/2013	
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	92	92	1.3	

Sample ID: 103013-2190-04				Received: 11/20/2013
Lab ID: 1332433004	Sampli	ng Location: Sid	dney, MT	
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/27/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	180	180	1.3	

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, 84123 USA PHONE +1 801 266 7700 FAX +1 801 268 9992

	ALS CROUP USA, CORP. Part of the ALS Group An ALS Limited Company
Enukonmental 🤰	www.alsglobal.com
The provide state of the provide state of the second state of the	RIGHT SOLUTIONS AICHT PARTTER

Page 1 of 5 Posted to NGB FOIA Reading Room May, 2018

BAEST WWW. ABLAZ COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1838 of 1990



Workorder: 34-1332433 Client Project ID: 013.IH1449.12/Sidney, MT Purchase Order: 013.IH1449.12 Project Manager: Non-Responsive

Analytical Results

Sample ID: 103013-2190-05	L			Received: 11/20/2013
Lab ID: 1332433005	Sampli	ng Location; Sid	dney, MT	
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	and the second states and
Lead	5400	5400	6.3	

Sample ID: 103013-2190-06				Received: 11/20/2013
Lab ID: 1332433006	Sampl	ing Location: Sid	dney, MT	
Method: NIOSH 7300 Mod.	Samplin	Prepared: 11/26/2013 Analyzed: 11/30/2013		
Analyte	ugisample	ug/ft ²	RL (ug/sample)	
Lead	130000	130000	130	

Sample ID: 103013-2190-07				Received: 11/20/2013
Lab ID: 1332433007	Sampli			
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	a series and the series of
Lead	81000	81000	130	

Sample ID: 103013-2190-08				Received: 11/20/2013
Lab ID: 1332433008	Sampli	ng Location: Sid	dney, MT	
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	AND THE REAL POINT
Lead	19	19	1.3	

Sample ID: 103013-2190-09					Received: 11/20/2013
Lab ID: 1332433009	Sampli	ng Location: Sid	dney, MT		
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²				Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft ^a	RL (ug	/sample)	And the second second
Lead	9.5	9.5	1	1.3	

Sample ID: 103013-2190-10	and the second se			Received: 11/20/2013
Lab ID: 1332433010	Sampli	and the second second		
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	6.9	6.9	1.3	and the second second



Workorder: 34-1332433 Client Project ID: 013.IH1449.12/Sidney, MT Purchase Order: 013.IH1449.12 Project Manager: Non-Responsive

Analytical Results				
Sample ID: 103013-2190-11	La construction of the second s			Received: 11/20/2013
Lab ID: 1332433011	· Sampli	ng Location: Sidne	ey, MT	
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	
Lead	8.4	8.4	1.3	

Sample ID: 103013-2190-12				Received: 11/20/2013
Lab ID: 1332433012	Sampli	ng Location: Sid	dney, MT	
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	2.3	2.3	1.3	

Sample ID: 103013-2190-13				Received: 11/20/2013
Lab ID: 1332433013	Sampling Location: Sidney, MT			15
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ^a			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	<1.3	<1.3	. 1.3	1

Sample ID: 103013-2190-14				Received: 11/20/2013
Lab ID: 1332433014	Sampli	an and a subdamping		
Method: NIOSH 7300 Mod.	Media: Ghost Wipe Sampling Parameter: Area 1 ft ²			Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	Church Contraction of the second
Lead	14	14	1.3	11

Sample ID: 103013-2190-15				Received: 11/20/2013
Lab ID: 1332433015	Sampli	ing Location: Sid	dney, MT	
Method: NIOSH 7300 Mod.	Samplin	Media: Gh g Parameter: Ar		Prepared: 11/26/2013 Analyzed: 11/30/2013
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	3.5	3.5	1.3	

Comments

Sample: 1332433005

The lead result for this sample is reported from 5X dilution data in order to obtain an instrument response within the linear range for lead. The reporting limit has been raised in proportion to the dilution level.



Workorder: 34-1332433

Client Project ID: 013.IH1449.12/Sidney, MT Purchase Order: 013.IH1449.12

Project Manager: Non-Responsive

Comments

Sample: 1332433006

The load result for this sample is reported from 100X dilution data in order to obtain an instrument response within the linear range for lead. The reporting limit has been raised in proportion to the dilution level.

Sample: 1332433007

The lead result for this sample is reported from 100X dilution data in order to obtain an instrument response within the linear range for lead. The reporting limit has been raised in proportion to the dilution level.

Report Authorization

Method	Nor Possonouve	Non-Responsive
NIOSH 7300 Mod.	Non-Responsive	

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com

General Lab Comments

The results provided in this report relate only to the items tested. Samples were received in acceptable condition unless otherwise noted. Samples have not been blank corrected unless otherwise noted. This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All quality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS - conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP) Utah (NELAC) Nevada Oklahoma Iowa Florida (TNI) Texas (TNI)	ADE-1420 DATA1 UT00009 UT00009 IA# 376 E871067 T104704458-11-1	http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/bsdw/labservice.htm http://www.iowadnr.gov/lnsideDNR/RegulatoryWater.aspx http://www.dep.state.fl.us/labs/bars/sas/qa/ http://www.tccq.texas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Lead Testing: CPSC Soil, Dust, Paint ,Air	ACLASS (ISO 17025, CPSC) AIHA (ISO 17025, AIHA ELLAP and NLLAP)	ADE-1420 101574	http://www.aclasscorp.com http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.adasscorp.com



Workorder: 34-1332433 Client Project ID: 013.IH1449.12/Sidney, MT

Project Manager:

Purchase Order: 013.IH1449.12

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity.

- LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity.
- ND = Not Detected, Testing result not detected above the LOD or LOQ.

NA = Not Applicable.

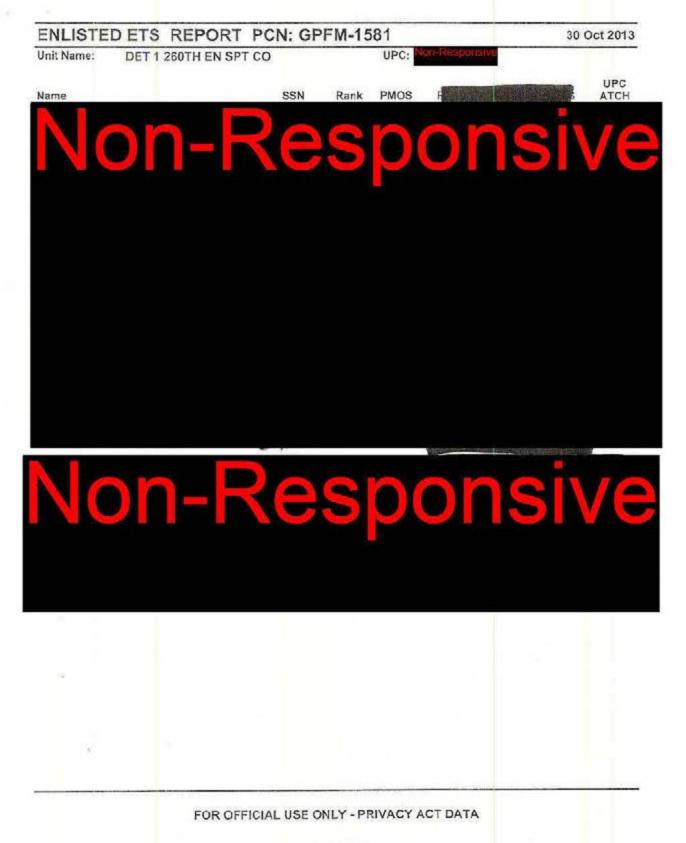
** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

	LABORATORIES		RESUL	TS REQUIRED B	- ADDITIONAL CH/ Y ABS PRIOR TO SE	DATE	
SO-1	41 Sible Strange	1449. S Spol	12 1- 7-5635	Quote No. Sample Col Sampling Si Industrial Pr Date of Colle Time Collect Date of S QC Requ	Ilection te	<mark>sive</mark> Y ₁ MT	
UEST FO	R ANALYSES Cilent Sample	Al Bu	HK/	Collector Signature	EQUESTED - Use Me	hod Number if Know	
Use Only	Number 103013-21	10-01-	(Liters)	Legel			
		- 03					
		-05					
-		-07.					_
		-03.					
		-10.	1				
		-12.	V				
	IN W						
				SI) o r	SI	

Released by National Guard Bureau Page 1843 of 1990



Page 1 of 1

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1844 of 1990

.12

AUARD	
F7 83	
Flementer Es	
EL Provident	
8 AU	
ALMEN .	
Posted to	ľ

Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Sidney IFR (Converted) - Sidney, MT

BEST AVAILABLE COPY BY Standard Copy Standard Copy BEST AVAILABLE COPY BEST AVAILABLE COPY 1910.1025 (h)(1) REFERENCES 29 CFR DATE CORRECTED Estimated Cost(s) OICINCOIC ACTION SUSPENSE DATE FR until the area is cleaned of cleanup. Have follow-up testing Clean the locker in accordance conducted to meet acceptable with the Armory SOP for lead throughout the facility to meet Prohibit use of the converted lead below ARNG thresholds. the ASHRAE recommended CORRECTIVE ACTIONS Increase temperatures (Abatement Plan) concentrations. range. RAC 4 N Converted IFR Facility SITE ASHRAE recommended range Temperatures are below the Lead concentrations exceed HAZARD DESCRIPTION established criteria 10302013-5.5 10302013-5.3 CONTROL NUMBER MTSIFR-MTSIFR-LINOS GENERATING Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1845 of 1990

Reference DA FORM 4754

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Sidney converted IFR. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.5.2 describes the following: the N is Conclusions & Recommendations and the 5.2 corresponds back to Section 5 – Sampling Results; Item 2 – Lead Wipe Sampling).

N5.2 Lead Sampling – Review the SOP for lead cleanup and follow-up housekeeping recommendations. Have follow-up testing conducted to ensure lead levels have been reduced to acceptable concentrations in the converted IFR.

N5.4 Indoor Air Quality – Increase temperatures throughout the facility to meet the ASHRAE recommended range.

FY 13 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	g	Q4 Annual
Bre	953-01-04	0			
a mit - 7 complex collected above Occupational Exposure Limit (OEL)	953-01-04	0			
	953-01-05	0			
Number of Personal Noise Dosimetry samples concered	953-01-05	0			
the second	953-01-06	0			
Number of Noise Sound Level samples collected >= 140	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are	953-01-07	0			
recommended for control	953-01-07	0			
Number of Breathing Zone samples collected above Occ	953-01-08	0		-	
Controlled, triat are recommended to collected above Occupational Exposure Limit (OEL) not Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not	953-01-08	0			
Controlled Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are	953-01-09	0			
recommended for control	953-01-09	0			
1.5	953-02-10	Ħ	THI	H	IHT
performed in the past 12 months	953-02-10	IHT	IHT	ΗT	IHT
Number of buildings for which all processes requiring a basic industrial hygiene	953-02-11	HT	ΗΤ	IHT	IHT
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	IHT	IHT	IHT	IHT
	953-02-12	IHT	IHT	ΗT	IHT
-	953-02-12	H	IHT	IHT	THI
Number of processes that were assessed for potential inhalation exposure to employees	953-02-13	IHT	IHT	THI	IHT
Number of processes that require an assessment for potential inhalation exposure to	953-02-13	HT	THI	. THI	IHT

Sidney IFR (Converted) Sidney, MT

rev. 8/2012

May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1847 of 1990

EV 13 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	G	Q4 Annual
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	ШТ	IHT	THI	IHT
	953-02-14	ΗT	IHT	IHT	IHT
	953-02-15	THI	IHT	IHT	IHT
	953-02-15	IHT	IHT	IHT	Η
Number of processes which have been measured for potential hazardous noise levels with a	953-02-16	THI	IHT	Ħ	HT
other Designation of the local division of t	953-02-16	IHT	IHT	THI	IHT
etry was colle the last 12 m	953-02-17	IHT	Η	IHT	ΗT
Number of personnel who require work shift dosimetry to quantify their daily noise exposures	953-02-17	ΗT	IHT	HI	IHT
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were	953-02-18	0			
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require	953-02-18	0			
Number of ventilation systems which require corrective action based on deficiencies identified	953-02-19	0	2		
during an IH survey	953-02-19	0			
	953-02-20	IHT	IHT	IHT	HT
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	HT	IHT	IHT	IHT

Sidney IFR (Converted) Sidney, MT

.

rev. 8/2012

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1848 of 1990

NES		Facility	Infor	MLABLE COPY mation Forr ober 3, 2013	n		
General Facility	Information		ate(s) o	of Previous IHSAVs	: None		
IH(s): Non-Resp	onswe	_		Date(s) of IHSA	AV: Octob	er 30, 2013	
Facility Name:	Armory with Basemen	t (Closed IFR)					
Address:	2190 West Holly Stree	t, Sidney MT 59	270		14.		
Facility Comman	der:	n-F	Re	espc	ons	sive	
No Person(s):	24 Admin: 2	Maint:	0	Work Sched:	M-F, 8-5	Size of Facility:	Unkown
Unit(s):	Det. 1 260 th Engineer				None		
	Sector Contraction of the Contraction	IC if available	ay side.			List All	
Primary work activities at Facility:							-

Written Health & Safety Programs / SOPs

Program	Program Needed	Have Program	Date of Last Training	# Enrolled	Comments
Bloodborne Pathogen	x				
Confined Space		-			No confined spaces
Emergency Preparedness		×	2011	30	
Hazard Communication	х				Not available
Hearing Protection	х				Plugs available, no written program
Lock Out/ Tag Out					None required
PPE	×				
Respiratory Protection	x				
Vision	X				Vision tested throughout military medical program

Others (Bloodborne Pathogens, Lock Out / Tag Out, Lifting Devices, Radiation, SOPs, etc.) - List on back

Y = Yes N = No NA = Not Applicable to this site

Documents / Records to Obtain

X Facility floor plan / evacuation map

X List of equipment serviced / maintained

Previous IH reports - none available

NA = Not Applicable to this site

х	Hazardous Materials inventory
X	Personnel list
	Others (List):



BEST AVAILABLE COPY DEPARTMENT OF THE ARMY AND THE AIR FORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE, SOUTHWEST 10510 Superfortress Ave, Suite C Mather, CA 95655

ARNG-CSG-IHSW

8 January 2013

MEMORANDUM FOR

Montana Army National Guard, ATTN: Deputy State Surgeon, Montana Medical Detachment, 1956 Mt Majo Street, Fort Harrison, MT 59636-4789

SUBJECT: Industrial Hygiene Site Assistance Visits for FY13

1. The National Guard Bureau, Industrial Hygiene – Southwest (IHSW) will be conducting annual Industrial Hygiene Site Assistance Visits, to include a cursory review of safety related items, for

-Hamilton Armory & Indoor Firing Range (IFR)(CL), 910 West Main Street, Hamilton, MT 59840

-Glasgow Armory & Indoor Firing Range (IFR)(CL), 81 Airport Road, Glasgow, MT 59230 -Indoor Firing Range (IFR)

(CL) 1008 U.S. 191, Malta, MT 59538

(CL) Dawson County Fairgrounds, P.O. Box 1323, Glendive, MT 59330

(CL) 2190 West Holly Street, Sidney, MT 59270

(A) 24 Fleshman Creek Road, Livingston, MT 59407

(A) 350 Airport Road, Belgrade, MT 59714

(CL) 600 Gilman Avenue, Butte, MT 59701

(A) 1900 William Street, Fort Harrison, Helena, MT 59636

(CL) RR2, 773 Airport Road, Lewistown, MT 59457

(A) 1840 U.S. 93, Kalispell, MT 59901

2. The primary purpose of this memorandum is to notify you of the anticipated site visits. We ask that you contact the facilities and coordinate the tentative dates for the site visits. Attached are a Request for Information (RFI)-(IH Site Assistance Visit Questionnaire) and a Memorandum of Instruction (MOI) outlining a tentative schedule and the objectives of our visit and should be forwarded to each facility POC.

3. Secondly, we ask that you contact the contractor within 20 working days to coordinate a tentative schedule. The contractor information is as follows Non-Responsive f Network Environmental Systems (NES). Non-Responsive

4. Finally, we ask that you provide IHSW personnel with a copy of the finalized schedule and facility POCs.

BEST AVAILABLE COPY

ARNG-CSG-IHSW	BEST AVAILABLE COPY
SUBJECT: Industrial	Hygiene Site Assistance Visits for FY13

5. Questions or comments may be directed to 854-1490/ (916) 812-5838 or Non-Responsive 16) 854-149

lon-

sponsiv

NGB, IHSW, CIV Industrial Hygiene

CF: FMO OHN SSO

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1851 of 1990



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Mexico • Nebraska

Industrial Hygiene Site Assistance Visit

Sidney Armory 2190 W. Holly Street Sidney, MT 59270 23 Pocil 2013

02 act 12

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1852 of 1990



DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste. C Mather, CA 95655

ARNG-CSG-IHSW

23 April 2013

MEMORANDUM THRU Montana Army National Guard, ATTN: Non-Responsive Medical Det Troop Medical Clinic, Room 1009, 1956 MT Majo St, Fort Hamson, WT 59636-4789

FOR Commander Sidney Armory, 2190 W. Holly Street, Sidney, MT 59270

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV), 2190 W. Holly Street, Sidney, Montana conducted on 02 October 2012.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Sidney Armory at 2190 W. Holly St. Sidney, MT on 02 OCT 2012.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

 d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

a. A building inspection of the armory, for asbestos, should be provided and a management plan in

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1853 of 1990

ARNG-CSG-IHSW

BEST AVAILABLE COPY

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV), 2190 W. Holly Street, Sidney, Montana conducted on 02 October 2012.

place for personnel working at and on the facility should be written from that inspection. (para. 3.4) (RAC 3)

 Improve lighting within the noted areas by replacing burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color. (para. 4.6) (RAC 3)

c. Perform monthly and yearly inspections of fire extinguishers, as required. (para. 4.11.3) (RAC 4)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

 Corrective measures should be implemented and accomplished at the lowest levels possible.
 Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

 Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

 Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

 The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

 b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

 Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1854 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV), 2190 W. Holly Street. Sidney, Montana conducted on 02 October 2012.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132 and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

f. Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the Senior Unit Commander of this Facility and any Co-Tenant Organizations or Units, review and provide assistance with implementation of these recommendations. This will educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at Von-Responsive



Non-Responsive

NGB, IHSW, CIV Industrial Hygiene

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1855 of 1990

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1856 of 1990 Reference DA FORM 4754

BEST AVAILABLE COPY

Page 1 of 1

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> 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.

- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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)

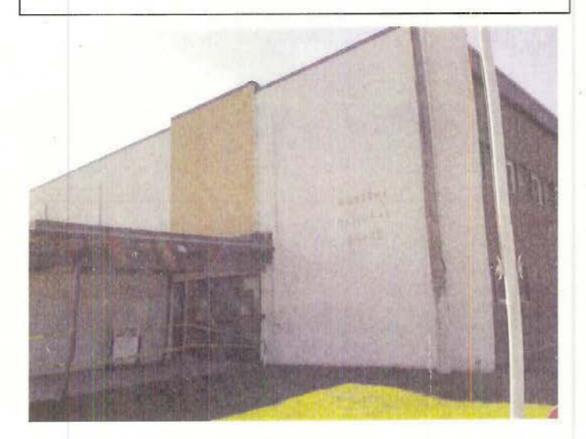
NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

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. <u>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.</u>

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.

Industrial Hygiene Site Assistance Visit Sidney Armory Sidney, Montana 2 October, 2012





www.nevglobal.net



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1861 of 1990 BEST AVAILABLE COPY

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

SIDNEY ARMORY 2190 WEST HOLLY STREET SIDNEY, MONTANA 59270

October 2, 2012

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1374.67



Non-Responsive

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1862 of 1990

Table of Contents

EXEC	1.5.2	SUMMARY1
1.0	INTRO	DDUCTION
	1.1 1.2	IHSAV Objectives
2.0	PROC	ESS DESCRIPTION
3.0	METH	10DS4
	3.1 3.2 3.3 3.4 3.5 3.6 3.7 3.8 3.9 3.10 3.11 3.12	Lead Wipe Sampling 4 Painted Surface Evaluation 4 Water Damage and Limited Visual Fungal Growth Evaluation 4 Asbestos Documentation 4 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality 4 Illumination Level Monitoring 5 Hazardous Material Storage and Use Procedures 5 Safety Training and Record Keeping 5 Exhaust Ventilation Survey 5 Sound-Level Measurements 5 Safety Walk-Through 5 Equipment Used 5
4.0	3.13 FINDI	Quality Assurance
	4.1 4.2 4.3 4.4 4.5 4.6 4.7 4.7 4.8 4.9 4.10 4.11	Lead Wipe Sampling 7 Painted Surface Evaluation 8 Water Damage and Limited Visual Fungal Growth Evaluation 8 Asbestos Documentation 8 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality 8 Illumination Level Monitoring 9 Hazardous Material Storage and Use Procedures 9 4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS) 9 4.7.2 Flammable Storage Cabinets 9 4.7.3 Flammable and POL Storage 9 Safety Training and Record Keeping 10 Sound-Level Measurements 10 Safety Walk-Through 10
5.0	2025	ECT LIMITATIONS
6.0		ECT APPROVAL

NES, Inc. NES Job Number: 013.1H1374.67

Appendices ...

Penaneco	
Appendix A	References
Appendix B	Assessment Criteria
Appendix C	Photo Log
Appendix D	Chemical Inventory
Appendix E	Floor Plan /IAQ - Temp, RH, & CO2 Monitoring
Appendix F	Ventilation Data
Appendix G	Field Notes
Appendix H	Calibration Certificates
Appendix I	Air Sampling & Metal/Lead Wipe Tables
Appendix J	Laboratory Reports
Appendix K	Employee List
Appendix L	IHSW Violation Inventory Log
Appendix M	Hazard Assessments
Appendix N	Recommendations
Appendix O	DD Forms 2214
Appendix P	IHSW Lead-Cleanup SOP
Appendix Q	Facility Information Worksheet
Appendix R	Installation Status Report (ISR)

IHSAV Sidney Armory Sidney, Montana Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

EXECUTIVE SUMMARY

On October 2, 2012, Non-Responsive dustrial Hygiene Technician for NES, Inc. (NES) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Sidney Armory located at 2190 West Holly Street in Sidney, Montana. The primary point of contact for information gathered during this survey wa Non-Responsive may be reached by phone at (406) 324-5500 or by email at NON-Responsive

The objectives of this IHSAV were to perform the following activities:

- · Evaluate configuration of battery storage and charging facilities;
- · Review hazardous material storage and use procedures;
- Review the Respiratory Protection Program and respirator use/storage;
- · Collect area and breathing zone air samples;
- · Collect metal surface wipe samples;
- Measure the volumetric flow of local exhaust ventilation systems;
- Monitor employee noise exposures through noise dosimetry and source measurements;
- Measure illumination levels;
- · Collect indoor air quality data;
- · Evaluate any existing safety hazards; and,
- · Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: Non-Responsive went above and beyond expectations to assist NES staff with completing the IHSAV.

IIISAV Sidney Armory Sidney, Montena Posted to NGB FOIA Reading Room May, 2018 Page 1 of 12

NES, Inc. NES Job Number: 013.IH1374.67

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1865 of 1990

1.0 INTRODUCTION

On October 2, 2012, Non-Responsive industrial Hygiene Technician for NES, Inc. (NES) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Sidney Armory located at 2190 West Holly Street in Sidney, Montana. The primary point of contact for information gathered during this survey was Non-Responsive at (406) 324-5500 or by email a Non-Responsive

1.1 IHSAV Objectives

The objective of the IHSAV is to evaluate the occupational environment of the administrative areas in the Armory, to determine the presence of operational health and safety risks, and to make recommendations for any corrective actions or follow-up work and to assist the Army National Guard in managing those risks.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the armory for water damage and the presence of fungal growth;
- Review asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the condition of the Heating, Ventilation, and Air-Conditioning system and collect indoor air quality data;
- Review hazardous material storage and use procedures;
- · Review safety training, and record keeping;
- · Perform a ventilation survey on the kitchen stove hood (if present);
- · Perform a noise survey on the kitchen appliances; and,
- Conduct a safety walk-through evaluation and note any existing safety hazards.

IHSAV Sidney Armory Sidney, Montana Page 2 of 12

NES, Inc. NES Job Number: 013.IH1374.67

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1866 of 1990

2.0 PROCESS DESCRIPTION

The Sidney Armory has one guard member who checks on the facility occasionally. The ARNG personnel assigned to this facility were deployed at the time of the IHSAV. The Armory has offices for administrative purposes and also contains a drill floor, a gym, a supply room, and a kitchen. There are no civilian employees employed at the Sidney Armory. Civilian functions are carried out rarely at this facility and are typically limited to banquets.

IHSAV Sidney Armory Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018

Page 3 of 12

NES, Inc. NES Job Number: 013.III1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1867 of 1990

3.0 METHODS

3.1 Lead Wipe Sampling

Lead wipe samples were collected on horizontal work and floor surfaces in various locations throughout the facility. Ghost Wipe[™] brand wipes were used by wiping a one square foot template. The collected wipe samples were placed in clean and labeled centrifuge tubes. Samples were submitted to ALS Environmental Laboratories located in Salt Lake City, Utah for analysis, using NIOSH method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.

3.2 Painted Surface Evaluation

The interior and exterior of the Armory was visually inspected for peeling paint on the walls and ceilings. No paint chip samples were collected because no peeling paint was encountered.

3.3 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the Armory was visually inspected for water damage and subsequent fungal growth resulting from moisture. No areas of water damage or fungal growth were identified.

3.4 Asbestos Documentation

An evaluation of asbestos documentation was performed. During the site visit, no asbestos building survey assessment or asbestos operations and maintenance plan documentation could be found.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation, and air-conditioning (HVAC) systems that serve the Sidney Armory was accomplished. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system was performed to note any obvious operational problems.

Carbon dioxide (CO₂), temperature, and relative humidity were measured throughout the Armory using a Gray Wolf IAQ Meter. The unit was calibrated before use with certified zero gas and 1,000-ppm CO₂ span gas. Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces.

IIISAV Sidney Armory Sidney, Montana Posted to NGB FOIA Reading Room May, 2018 Page 4 of 12

NES, Inc. NES Job Number: 013.IH1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1868 of 1990

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the Sidney Armory. The instrument used for the illumination survey was a Konica Minolta Illuminance Meter, Model TL-1. Measurements taken were obtained at typical working locations such as desks, computers, workstations and general working areas.

3.7 Hazardous Material Storage and Use Procedures

A review of the Armory's chemical inventory and material safety data sheet (MSDS) file was accomplished. Chemical storage areas, i.e., flammable storage cabinets/rooms were also inspected as part of this IHSAV.

3.8 Safety Training and Record Keeping

An inspection of the Armory's training programs and training documentation was performed to determine if the site specific training programs and annual documentation is current.

3.9 Exhaust Ventilation Survey

There were no exhaust ventilation hoods used at the facility. Therefore, air velocity and flow measurements could not be measured.

3.10 Sound-Level Measurements

There were no appliances producing elevated sound-levels at this facility, therefore, soundlevel measurements were not collected.

3.11 Safety Walk-Through

A safety walk-though evaluation of the Sidney Armory was performed to document the presence of a fire alarm, to determine if fire extinguishers are properly mounted and are current on their monthly and annual inspections, to inspect ground fault circuit interrupter (GFCI) electrical outlets, if eyewash station inspections are current, and to document any fire or safety hazards in the Armory.

3.12 Equipment Used

The following equipment was used for this survey.

Туре	Model Number	Serial Number	Calibration Date
Konica Minolta Illuminance Meter	TL-1	679404	May 2012
Gray Wolf IAQ Meter	IQ-410	4G2BDW3381NWP	May 2012

IHSAV Sidney Armory Sidney, Montana Posted to NGB FOIA Reading Room May, 2018 Page 5 of 12

NES, Inc. NES Job Number: 013.IH1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1869 of 1990 Please see Appendix H for a complete inventory of calibration certificates for equipment that may have been used during this IHSAV.

3.13 Quality Assurance

NES employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- · Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;
- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and,
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

IHSAV Sidney Armory Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018 Page 6 of 12

NES, Inc. NES Job Number: 013.IH1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1870 of 1990

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Wipe Sampling

Wipe samples for lead dust, were collected from horizontal surfaces in selected representative areas of the Sidney Armory to determine if housekeeping efforts are successful. The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot ($\mu g/ft^2$) as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 $\mu g/ft^2$ is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

A total of eight Ghost WipeTM lead samples were taken during the time of the IHSAV. The first five samples were collected from the center and four corners of the drill hall floor. The analytical results for the samples listed above, ranged from < 2.5 μ g/ft² to 11 μ g/ft²; which was below the 40 μ g/ft² criterion.

Additional lead wipe sampling was taken from approximately 25% of the rest of the building. The three additional samples were collected from the following areas: the kitchen counter; the table top in the 1st floor office; and the supply room. The analytical results for these wipe samples collected were below the established criteria. The analytical results are provided in the table below.

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard (µg/ft ²)
100212-Sidney-01	Drill Floor	Northwest corner, floor sample	5.0	≤ 40
100212-Sidney-02	Drill Floor	Southwest corner, floor sample	< 2.5	≤ 40
100212-Sidney-03	Drill Floor	Center of drill floor, floor sample	< 2.5	. ≤ 40
100212-Sidney-04	Drill Floor	Southeast corner, floor sample	< 2.5	≤ 40
100212-Sidney-05	Drill Floor	East Side at bay door, floor sample	11	≤ 40

Page 7 of 12

NES, Inc. NES Job Number: 013.IH1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1871 of 1990

100212-Sidney-06	Kitchen	Counter top	2.5	≤ 40
100212-Sidney-07	1st Floor Office	Table Top	< 2.5	≤ 40
100212-Sidney-08	Supply Room	Center, floor sample	4.2	≤ 200
100212-Sidney-Blank			< 2.5	NA

See Appendix I, Table 1 for a table of analytical results. Analytical laboratory reports are provided in Appendix J.

4.2 Painted Surface Evaluation

No paint chip samples were collected because no peeling paint was identified.

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

During the inspection of the facility, no water intrusion or fungal growth issues were observed.

4.4 Asbestos Documentation

No suspect asbestos containing materials were observed in the Sidney Armory. Asbestos documentation including an asbestos building survey or an asbestos operations and maintenance plan were not available for review on site.

4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

The HVAC systems were all functioning and up to date on maintenance and inspections during the time of the IHSAV. The central HVAC system provides AC and heating. All heating and cooling air is direct-ducted to the offices and the drill floor.

Carbon dioxide measurements are often used as a screening technique to evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. Human occupants produce CO₂, water vapor, and other bioeffluents. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, *Ventilation for Acceptable Air Quality*, recommend maintaining CO₂ below a concentration that is 700 parts per million (700 ppm) above outdoor levels. Outside CO₂ concentrations are typically about 350 ppm. Carbon dioxide concentrations throughout the facility were below 1050 ppm. The highest CO₂ concentration measured was 543 ppm in the office adjacent to the supply room.

IHSAV Sidney Armory Sidney, Montana Posted to NGB FOIA Reading Room

May, 2018

Page 8 of 12

NES, Inc. NES Job Number: 013.IH1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1872 of 1990 ASHRAE recommends maintaining temperatures between 68 and 75°F. Relative humidity should be maintained between 30% and 60% to minimize the growth of allergenic or pathogenic organisms. Building air temperatures ranged from 72.4 to 74.8°F and relative humidity was between 31.3 and 32.7% during the testing period.

4.6 Illumination Level Monitoring

Illumination levels were measured throughout the facility. The numbers represent the illumination level in foot-candles (FC). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or workbench were taken at waist level.

The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 FC is the minimum lighting requirements for the performance of tasks where reading is required, 30 FC is required for work areas where reading is not required, 10 FC is required for non-work areas, such as aisles and corridors, and 5 FC is required for walking surfaces, such as mechanical spaces.

Based on the above criteria the lighting in the upstairs office (south side) and the class room is inadequate for tasks being performed. Please see Appendix E for a table of lighting results.

4.7 Hazardous Material Storage and Use Procedures

4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS)

Inventories of all hazardous materials used by the Armory along with their associated Material Safety Data Sheets (MSDSs) are maintained in a master binder within the facility. A copy of the Armory's chemical inventory is provided in Appendix D.

4.7.2 Flammable Storage Cabinets

Flammable storage cabinets were inspected and no storage incompatibilities or leaking materials were found. The lockers were in good condition and all of the doors were noted to close properly.

4.7.3 Flammable and POL Storage

Not applicable to this facility.

IHSAV Sidney Armory Sidney, Montana Page 9 of 12

NES, Inc. NES Job Number: 013.III1374.67

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1873 of 1990

4.8 Safety Training and Record Keeping

The following training documentation was found at the site:

- None available

Personnel assigned to this facility were deployed at the time of the IHSAV.

4.9 Exhaust Ventilation Survey

No air velocity measurements were taken from kitchen canopy hoods because they were not being used.

4.10 Sound-Level Measurements

Since there were no appliances producing elevated sound-levels at this facility, no soundlevel measurements were taken on kitchen appliances during the IHSAV.

4.11 Safety Walk-Through

- 1. Housekeeping throughout the facility was good.
- 2. There is no fire alarm present in the facility.
- Fire extinguishers are strategically located in the hallway, offices and throughout the drill floor. Monthly and annual fire extinguisher inspections were out of date. Personnel assigned to this facility were deployed at the time of the IHSAV.
- Fire evacuation plan is prominently posted throughout the building. Egress routes are marked of the fire evacuation plan.
- 5. GFCI outlets functioned properly when tested.

Page 10 of 12

NES, Inc. NES Job Number: 013.III1374.67

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1874 of 1990

5.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, *NES* professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. *NES* assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of *NES*, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since *NES* is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

IHSAV Sidney Armory Sidney, Montana

Posted to NGB FOIA Reading Room May, 2018 Page 11 of 12

NES, Inc. NES Job Number: 013.IH1374.67

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1875 of 1990 BEST AVAILABLE COPY

6.0 PROJECT APPROVAL

This IHSAV report was reviewed and approved by:



June 7, 2013	
Date	

Principle-In-Charge

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact Non-Responsive at 916-353-2360, or Non-Responsive the Southwest Regional Industrial Hygiene Office, 916-804-1707. Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

IIISAV Sidney Armory Sidney, Montana Posted to NGB FOIA Reading Room May, 2018 Page 12 of 12

NES, Inc. NES Job Number: 013.1111374.67

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1876 of 1990

APPENDIX A

REFERENCES

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process

AR 385-10, The Army Safety Program

Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

TB MED 503, The Army Industrial Hygiene Program

- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1877 of 1990

APPENDIX B

ASSESSMENT CRITERIA

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available). OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Occupational Exposure Limit

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).



Photo 1: Front of building, Sidney armory located in Sidney, Montana.



Photo 2: Signage in front of the Sidney armory.



Photo 3: Southeast view of drill floor.

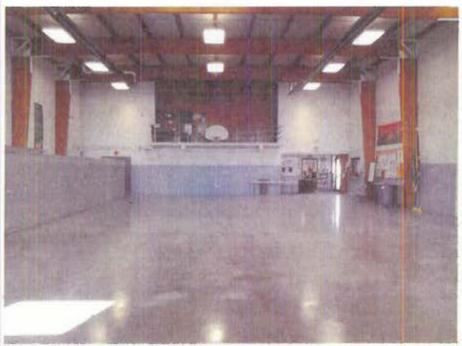


Photo 4: West view of drill floor.



Photo 5: Main office located on first floor.

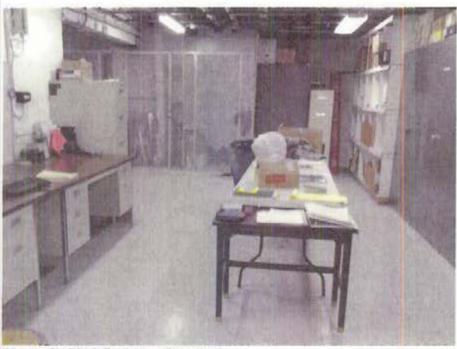


Photo 6: First floor supply room.

BEST AVAILABLE COPY

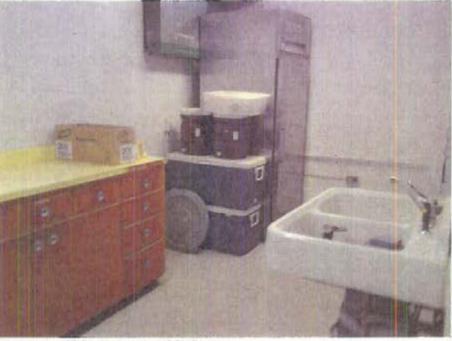


Photo 7: Sidney Armory kitchen.

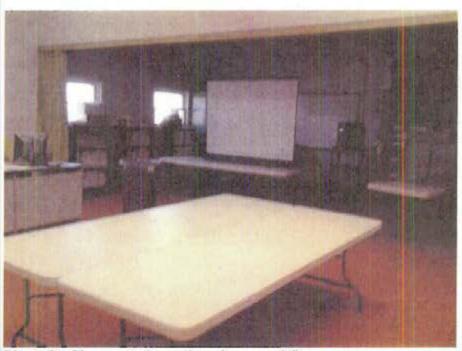


Photo 8: Classroom located on the second floor.

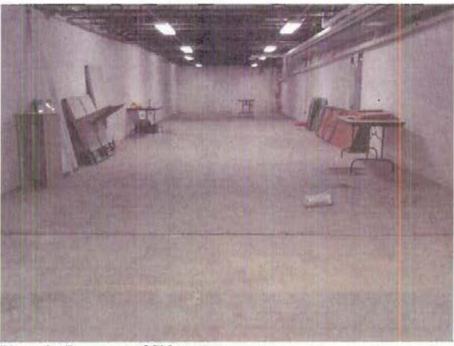


Photo 9: Basement of Sidney Armory.

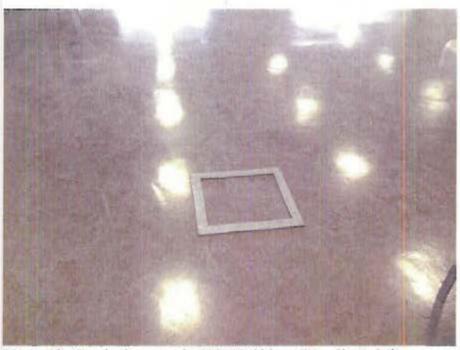


Photo 10: Lead wipe sample 100213-Sidney-01 collected from northwest corner of drill floor.



Photo 11: Lead wipe floor sample 100213-Sidney-02 collected from southwest corner of drill floor.

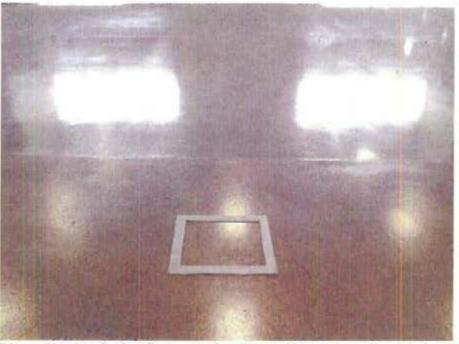


Photo 12: Lead wipe floor sample 100213-Sidney-03 collected from center of drill floor.



Photo 13: Lead wipe floor sample 100213-Sidney-04 collected from southeast corner of drill floor.



Photo 14: Lead wipe floor sample 100213-Sidney-05 collected from northeast corner of drill floor, at bay door.

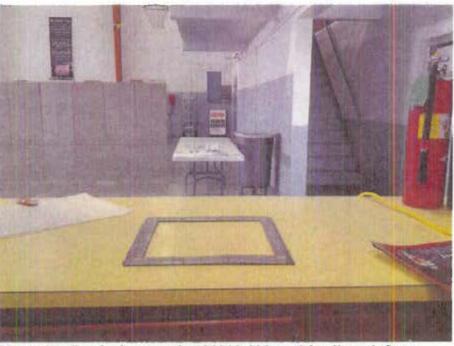


Photo 15: Lead wipe sample 100213-Sidney-06 collected from kitchen table top.

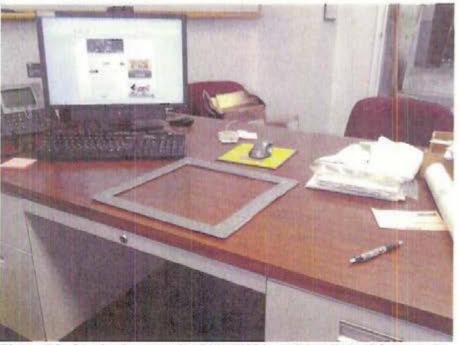


Photo 16: Lead wipe sample100213-Sidney-07 collected from main office desk table top, first floor.



Photo 17: Lead wipe floor sample 100213-Sidney-08 collected from supply room floor.

* . .

Montana ARNG Hazardov - Mat rials Inventory Database: Print Inventory BEST AVAILABLE COPY Page 1 of 2

Print Inventory

Print Inventory Cancel

Unit CO	: DET	1 260t	h HORIZ EN	G Sto	rage: F CAB	LAM	1	Mo 2/1/2	nth: 011
	Item		NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
01	ENAMEL,	CAMO GREY	8010-00-664-1914	LHB	ВРМТВ	4	CN	1007	V3
02	ENAMEL,	GREY	8010-00-721-9754	LHB	BHPYD	2	CN	1007	V3
03	ENAMEL,	RED	8010-00-141-2952	LHB	BHBSB	3	CN	1007	V3
04	ENAMEL,	BLACK	8010-00-290-6984	LHB	внојр	2	CN	1007	V3
05	ENAMEL,	BROWN	8010-00-348-7715	SO SURE		1	CN	1007	V3
06	CLP	T.	9150-01-054-6453	BREAKFREE	CCCDS	1	PT	1008	V4
07	GAA		9150011977693	SUMMIT		3	14 OZ CONTAINER		
08	CLP		9150-01-102-1473	BREAKFREE	BXWDW	6	.SOZ BT	1008	V4
09	LATEX, V	WHITE	797034 O/M (1-4)	VALSPAR	0-2-0-2	0	GL		
10	ENAMEL, YELLOW	, OSHA	04-400-62	COLUMBIA		2	GL		
11	DIESEL	FUEL	D	NA		5	GALLONS		
12	CLP		o	BREAKFREE		21	3.72 FL OZ.		

BRAKE FLUID,

httPosted to NGB FDIA Reading R0007/mt_env_hmi/HMI/printInventory.aspfoiA Requested Rection #J-15 0085 (MT)3/2012 May, 2018 Released by National Guard Bureau Page 1888 of 1990

Montana ARNG Hazardon Mathials Inventory Database: Print Internet of the second second

Page 2 of 2

13	SILICONE	9150-01-102-9455	GSD INC.		1	GL		
14	ENGINE LUB	9150-01-152-4117	MIDATLANTIC		13	1 QT	п	11.16
15	STARTING FLUID	6850-00-823-7861	SPRAY PRODUCTS	CKSZT	0	CN	1007	V3
16	ANTIFREEZE	6850-01-464-9125	FLEET CHARGE		1	GL		
17	DIESEL CONDITIONER TREATMENT	O	HOWES LUB	•	. 4	РТ		
18	Lubricating Engine Oil	9150-01-496-1946	MIL-PRF		10	GL	15-81-1-0115	

rage 1 01 J

BEST AVAILABLE COPY

Print Inventory

Print Inventory Cancel

Unit: DET CO		1 260th HORIZ ENG		Storage: JANITORIAL		3	Month: 2/1/2011		
SLN	Item	4	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
01	HORIZON	100	7930-00-N01-8106	JOHNSON WAX	BLXRZ	3	GL		N1
02	HORIZON	400	7930-00-F03-8657	JOHNSON WAX	BWVMD	o	GL		N1
03	AJAX QUI	SOLV	7930-00-F01-6389	COLGATE	BKGKS	4	QT		
04	POWER TI	ME	7930-01-436-8045	ROCHESTER MIDLAND	CFDNN	6	GL		
05	BETCO TO CLEANER	ILET		NATIONAL LABORATORIES	BDLHV	8	QT		C1
06	LIME-SOL	-	0	ROCHESTER MIDLAND		o	GL		
07	RING MAS		1846 (1291B)	ZEP MANUFACTURING		0	QT	1	
08	BETCO FL	OOR SEALER	o	BETCO		4	GAL	hCr	
09	ALL PURP	OSE CLEANER	7930-00-926-5280	LHB	CGNHK	O	PT		
10	MONTAN	DELUXE	0	MONTANA BRUSH AND BROOM		1	GAL		
11	BETCO PL	JSH		BETCO		4	QT		
12	A-125 DR	Y	6840-01-313-1901	AIRWICK PROFESSIONAL	CDJTG	1	CN-1/2 PACKETS		B3

Posted to NGB FOIA Reading Room http://www.construction.com/foil/files/f **BEST AVAILABLE COPY**

Print Inventory

Print Inventory Cancel

Jnit: DET 1 260th HORIZ ENG			Storage: JANITORIAL		Month: 2/1/2011				
SLN	Item	. e	NSN	Manufacturer	MSDSID	Quantity	Unit of Issue	Shelf Life	нсс
01	HORIZON	100	7930-00-N01-8106	JOHNSON WAX	BLXRZ	3	GL		N1
02	HORIZON	1 400	7930-00-F03-8657	JOHNSON WAX	BWVMD	o	GL .		N1
03	AJAX QUI	K SOLV	7930-00-F01-6389	COLGATE PALMOLIVE	BKGKS	4	QT		
04	POWER T	IME	7930-01-436-8045	ROCHESTER MIDLAND	CFDNN	6	GL		
05	BETCO TO CLEANER			NATIONAL LABORATORIES	BDLHV	8	QT		C1
06	LIME-SOL		0	ROCHESTER MIDLAND		o	GL		
07	RING MAS	STER ALL CLEANER	1846 (1291B)	ZEP MANUFACTURING		o	QT	2	
08	BETCO FL	OOR SEALER	o	BETCO		4	GAL		
09	ALL PURP	OSE CLEANER	7930-00-926-5280	LHB	CGNHK	o	PT		
10	MONTANA	DELUXE	0	MONTANA BRUSH AND BROOM		1	GAL		
11	BETCO PL	ISH		BETCO		4	QT		
12	A-125 DR	Y	6840-01-313-1 <mark>90</mark> 1	AIRWICK PROFESSIONAL	CDJTG	1	CN+1/2 PACKETS		83

Posted to NGB FOIA Reading Room htt:May,2008 tenviromental:8087/mt_env_hmi/HMI/printInventory.asp?siteReleased 69/National Guard Bureau/2011 Page 1891 of 1990

			DEST AV					
13	ветсо ні	TECH FINISH	0	ветсо		в	GL	-
14	BETCO SU SEALER	JRE CURE	o	BETCO		3	5GL	
15	RENOWN GLASS CL			AMSAN		1	GAL	
16	SPRAY NI	NE	o	SPRAY NINE CORP		5	24 OZ BOTTLE	
17	LIQUID H	AND SOAP	8520002280598	SKILCRAFT		1	1 GALLON JUG	
18	GOOD SET	NSE ODOR ACTANT	401622 (GCN 4985F-00)	SC JOHNSON & SON		8	CN	V3
20	AJAX CHLO CLEANER	ORINE		XAÇA		1	EA	
21	MATALIST FINISH	20 FLOOR	7930-01-131-5648	RECKITT & COLMAN	СНСВТ	2	GL	
22	ANTIFOGG CLEANER	ING GLASS	7930-00-901-2088	SKILCRAFT		2	1GL	
23	METALIST BUFF REST		7930-00-N02-5479	RECKITT BENCKISER	BMPPL	o	GL	· N1
24	METALIST PENETRAT STRIPPER	ING WAX	7930-00-F02-5521	RECKITT BENCKISER	BWTHZ	0	GL	
5	MASTERPI STRIPPER	ECE WAX	7930-00-F02-5521	RECKITT & COLMAN	BPSPK	o	GL	
6	BUFFERALI CLEANER/M	NEUTRALIZER	7930-01-436-8000	ROCHESTER MIDLAND	CFDNK	0	GL	
7	SIMPLE GR	EEN	7930-01-342-5316	SUNSHINE MAKERS	CPYLC	1	5GL	

httpPosted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (MT) May, 2018 Page 1892 of 1990

BEST AVAILABLE COPY

1 age 2 01 J

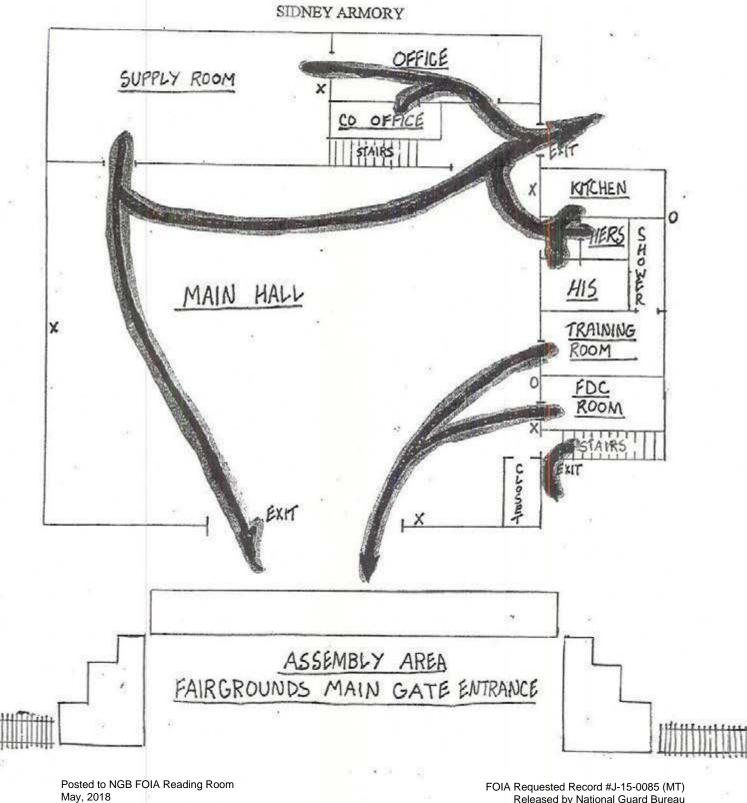
BEST AVAILABLE COPY

28	SPRAY BUFF	7930-01-380-8419	SPARTAN	1	5GL	
29	ANTIFOGGING GLASS CLEANER	7930-01-326-8110	SKILCRAFT	з	1602	
30	6010	6850-00-926-2275	G010	4	160Z	
31	WAX POLISH	0	CLASSIC SHINE	1	170Z	
32	ABSORBENT	7930-00-269-1272	Capital Soap Products	2	45 lbs.	

Posted to NGB FOIA Reading Room httpay 12018tenviromental:8087/mt_env_hmi/HMI/printInventory.asp/siteReleased by National Guard Bureau//2011 Page 1893 of 1990

ANNEX A (Drawing of facility) for DET 1 BTRY B 1-190TH FA BN

- 1. Arrows denote evacuation routes.
- 2. "X" indicates fire extinguishers.
- 3. "O" indicates water outlet.



Released by National Guard Bureau Page 1894 of 1990

BEST AVAILABLE COPY

×

IAQ MEASUREMENTS SIDNEY ARMORY SIDNEY, MT OCTOBER 02, 2012

Location	CO ₂ max permissible level 1,035 ppm	Temperature permissible range 68 - 75°F	RH% permissible range 30-60%	CO max permissible range 200 ppm. STEL
First floor, supply room	492	72.4	32.1	0.8
First floor, office	543	73.5	32.7	0.9
First floor, kitchen	427	73.5	31.7	1.1
First floor, male rest room	426	73.8	32.4	1.3
First floor, female rest room	437	73.5	31.9	1.2
First floor, FDC room	441	73.6	31.9	1.1
First floor, center of drill floor	454	74.1	31.6	1.1
First floor, southeast corner of drill floor	427	73.7	31.5	1.2
Second floor, south office	462	73.8	31.3	1.0
Second floor, north office	443	72.8	31.3	1.2
Second floor, classroom	491	73.5	31.3	1.0

CO2. Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL - Short Term Exposure Limit

ILLUMINANCE SURVEY SIDNEY ARMORY SIDNEY, MT OCTOBER 02, 2012

Location	Light - FC	Minimum lighting requirements - FC
First floor, supply room	41.1	30
First floor, office	68.2	50
First floor, kitchen	35.1	30
First floor, male rest room	30.2	30
First floor, female rest room	62.8	30
First floor, FDC room	30.0	30
First floor, center of drill floor	74.8	30
First floor, southeast corner of drill floor	31.1	30
Second floor, south office	41.6	50
Second floor, north office	56.5	50
Second floor, classroom	47.6	50

*FC= foot candle measurement

BEST AVAILAB	LE COPY	
Armany Sidney	(13·1H1374.67	1902/12
facility incorp ist than only M42s chem inventory list		8
mplyc, lut	8 . A . A . A . A . A . A . A . A . A .	an angar A
hazandous inventoytej	240 - 140 - 141	
-lead wipes - -laa -	· · · · · · · · · · · · · · · · · · ·	
- photo leg		n an alter and V
-ventuion nobithen -		
- Fredian -> no five alar		
- Magmat storage - 7 organis	goval	2) 12/1/2011
	n y - Annan Anna 1987 - Anna Anna 1987 - Anna Anna Anna Anna Anna Anna Anna An	
	a de ara	*
	14.2° m	

-

ł

l

44.71

1, 111

2.141

.....

11112

handler of

- F - 4

.

a - the

4......

-

4

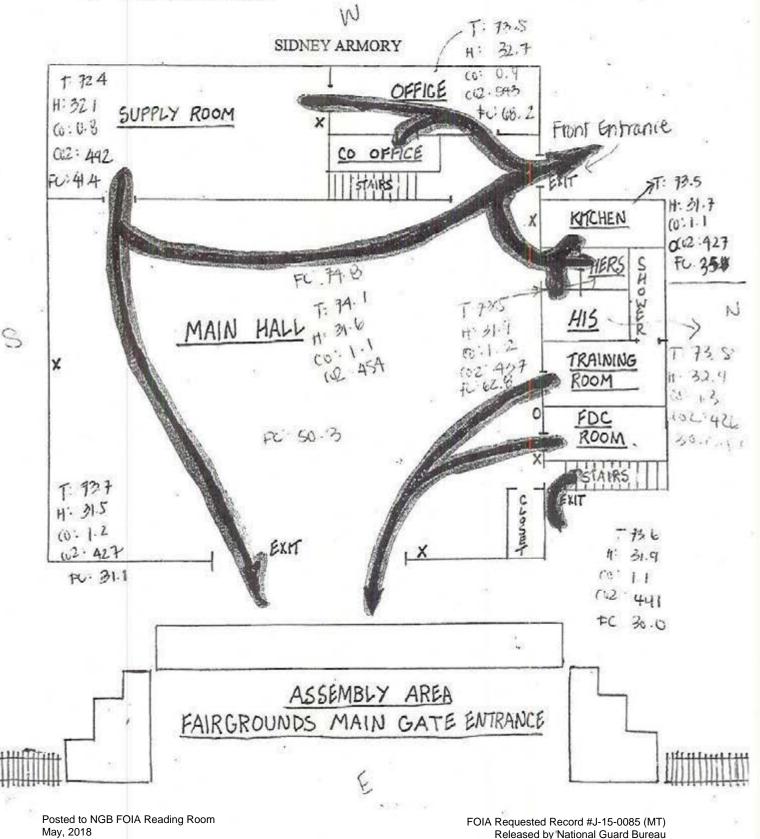
013-141374. 67 10/2/12 Almory Sidney Photo Lug 01-08 - Laid samples Almoly Sign 190 Aulding 10 to The anil flour SUU 11: SE the 12: TU kitchin, View gym area (duil 13: flar NW dial Hoor frew to 14 2nd floor (Shy) NOUR year from 15: dull flow 2 vd CADO ILLAS 111. 2nd there appende 17. 's view 18. SLYPPY num connahing office (small), E view 19. VIEw to the N. 20. othie (main) 21. busement 9/20/14 AED good unni

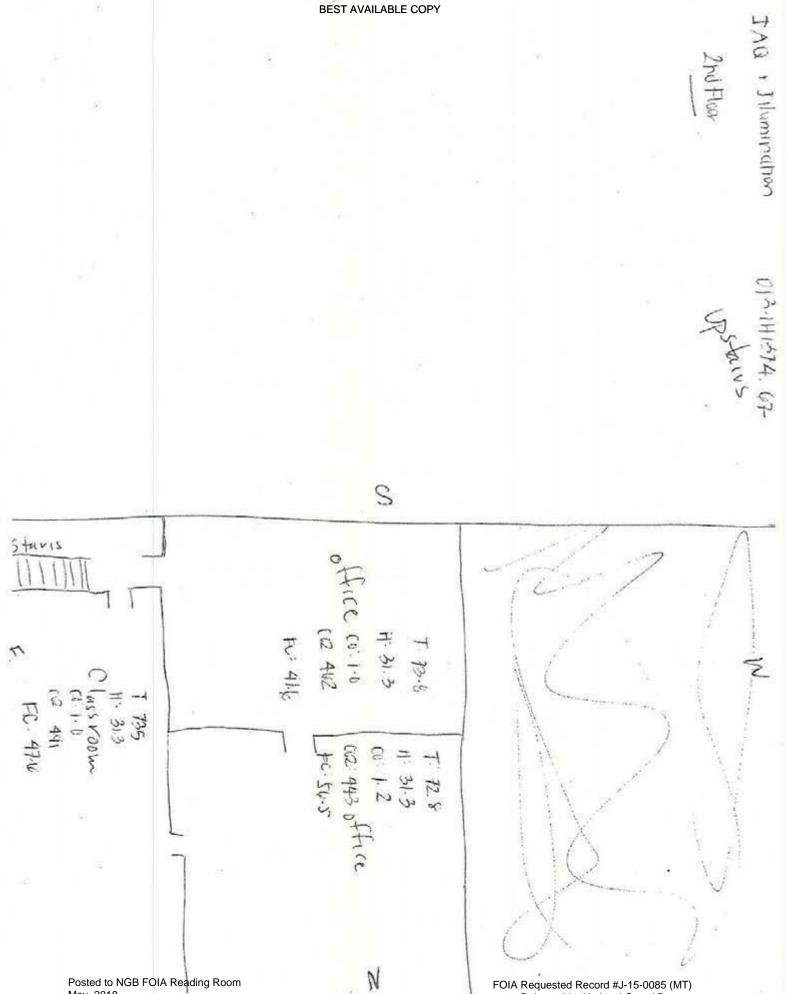
013. 1H1374.07

10/2/12

ANNEX A (Drawing of facility) for DET 1, BTRY B 1-190TH FA BN

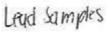
- 1. Arrows denote evacuation routes.
- 2. "X" indicates fire extinguishers.
- "O" indicates water outlet.





Posted to NGB FOIA Reading Room May, 2018

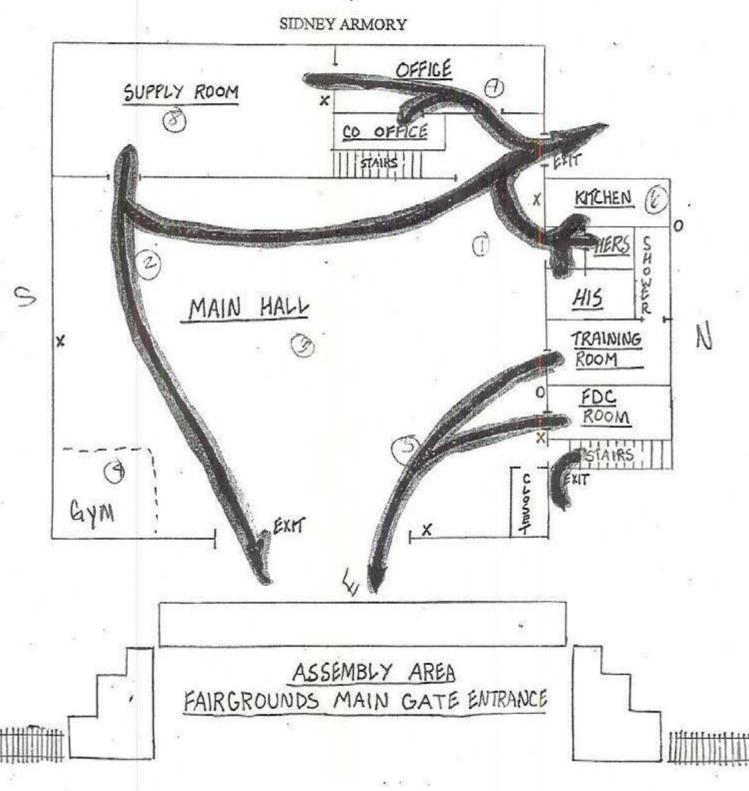
FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1900 of 1990



013.1H1374.67.

ANNEX A (Drawing of facility) for DET 1, BTRY B 1-190TH FA BN

- 1. Arrows denote evacuation routes.
- 2. "X" indicates fire extinguishers.
- 3. "O" indicates water outlet.



Posted to NGB FOIA Reading Room May, 2018

Tekt Service Solu	tions	Certificate of Calibration 6209107 Certificate Page 1 of 1
Company ID: 607 INDUSTRIAL HY NOT-Responsiv 10510 SUPERFO MATHER, CA 95	7229 GIENE SW RECORTRESS AVE SUITE	nt Identification PO Number: Internet LL
	H225437 KONICA MINOLTA ILLUMINANCE METER	Model Number: TL-1 Serial Number: 00679404
and the second	Certifics	tte Information
	CALIBRATION NORMAL IN TOLERANCE IN TOLERANCE MINOLTA T-1M ILLUMINANCE METE	Technician: Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS

Tektronix Service Solutions certifies the performance of this instrument has been verified using equipment of known accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the International System of Units (SI), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL 2540.1-1994. The quality system is registered to ISO9001.

This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

Approved By Service Representative

		Calibr	ation Standards			
NIST Traceable#	Inst. ID#	Description	Manufacturer	Model	Cal Date	Date Due
1700230826	17-1001076	6 STEEL RULE	STARETT	C416R-72	10Jun2010	10Jun2012
1700276206	17-2007214	1000W LIGHT BULE	OPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
1700201473	4083RC	MULTIMETER	FLUKE	8842A	25Jul2011	25Jul2012
1700201472	461952	CURRENT SHUNT	LEEDS & NORTHRUI	4360	09Aug2011	09Aug2012

6120 Hanging Moss Road • Orlando, FL 32807 • Phone: 800-438-8165 • Fax: 407-678-4854

BEST AVAILABLE COPY

GrayWolf Sensing Solutions GrayWolf Calibration Information: www.wolfsense.com/calibration.html Phone: (203) 402-0477 GrayW-* on the web: www.graywolfsensing.com

<u>Carbon Dioxide: s/n 012149</u> Actual: Measured:	Temperature Check: Actual: Measured:	Calibration Date: Calibration Due Date:	Model Number of UUT#: Display Model Number:
379ppm 379ppm	18.7°C 18.7°C	Industrial Hygiene 5/2/2012 5/2/2013	N/A
1250ppm 1250ppm	43.2°C 43.2°C		
Carbon Monoxide: s/n 11031536110 Actual: Oppm Measured: Oppm	Relative Humidity Check: Actual: 0.0% Measured: 0.0%		Probe Software Version: 1.3,0,38 Display Software Version: N/A
s/n 11031536 ual: Oppm ed: Oppm	<u>dity Check:</u> Jal: 0.0%RH ed: 0.0%RH		
<u>.6110</u> n 97.3ppm n 97.3ppm	ин 75.3%RH 8H 75.3%RH	Ambient Conditions: Temperature: 23.9°C Relative Humidity: 33.7%RH Barometric Pressure: 1010.4mbar	Serial Number: 01-624 Display Serial Number: N/A

BEST AVAILABLE COPY

E

GrayWolf Sensing Solutions Calibration Certificate

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1903 of 1990

TABLE 1 LEAD WIPE SAMPLE RESULTS SIDNEY ARMORY SIDNEY, MT OCTOBER 02, 2012

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG Standard
100212-Sidney-01	Drill Floor	Northwest corner, floor sample	5.0	≤40
100212-Sidney-02	Drill Floor	Southwest corner, floor sample	< 2.5	≤40
100212-Sidney-03	Drill Floor	Center of drill floor, floor sample	<2.5	≤40
100212-Sidney-04	Drill Floor	Southeast corner, floor sample	<2.5	≤40
100212-Sidney-05	Drill Floor	East Side at bay door, floor sample	11	≤40
100212-Sidney-06	Kitchen	Counter top	2.5	≤ 40
100212-Sidney-07	1 st Floor Office	Table Top	< 2.5	≤40
100212-Sidney-08	Supply Room	Center, floor sample	4.2	≤ 200
100212-Sidney- Blank	-	-	< 2.5	NA

µg/ft² = micrograms per square foot ARNG = Army National Guard

ND = none detected at or above the analytical detection limit

NA = not applicable

ANALYTICAL REPORT



Report Date: October 10, 2012

Von-Responsiv

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630 Phone: (916) 353-2370 x 20 Fax: (916) 353-2375

Workorder: 34-1228246 Client Project ID: Sidney Armory Purchase Order: 013.IH1374.67 Project Manager: Non-Responsive

Analytical Results

Sample ID: 100212-Sidney-01 Media: Ghost Wipe			Collected: 10/02/2012					
Lab ID: 1228246001	Sampling Location: Sidney Armory					Sampling Location: Sidney Armory		Received: 10/08/2012
Method: NIOSH 7300 Mod.	Samplin	Prepared: 10/09/2012 Analyzed: 10/09/2012						
Analyte	ug/sample	ug/ft ²	RL (ug/sample)					
Lead	5.0	5.0	2.5	-				

Sample ID: 100212-Sidney-02	nple ID: 100212-Sidney-02 Media: Ghost Wipe				
Lab ID: 1228246002	Sampling Locat	Received: 10/08/2012			
Method: NIOSH 7300 Mod. Sa		Sampling Parameter: Area 1 ft ²			
Analyte	ug/sample	ug/ft²	RL (ug/sample)		
Lead	<2.5	<2.5	2.5		

Sample ID: 100212-Sidney-03	idney-03 Media: Ghost Wipe			Collected: 10/02/2012			
		Sampling Location: Sidney Armory Sampling Parameter: Area 1 ft ²			8246003 Sampling Location: Sidney Armory		Received: 10/08/2012
					Analyte	ug/sample	ug/ft ²
Lead	<2.5	<2.5	2.5				

Sample ID: 100212-Sidney-04 Media: Ghost Wipe			5	Collected: 10/02/2012				
Lab ID: 1228246004	Sampling Location: Sidney Armory Sampling Parameter: Area 1 ft ^z			DID: 1228246004 Sampling Location: Sidne		Sampling Location: Sidney Armory		Received: 10/08/2012
Method: NIOSH 7300 Mod.				Prepared: 10/09/2012 Analyzed: 10/09/2012				
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	all and an and the second second second				
Lead	<2.5	<2.5	2.5					

ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, USA 84123 PHONE +1 801 266 7700 FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Laboratory Group A Campbell Brothers Limited Company

www.alsglobal.com

RIGHT SOLUTIONS MONT PARTIES

Page 1 of 4 Posted to NGB FOIA Reading Room May, 2018

Environment

BEST AVAILABLE COBY AM

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1905 of 1990 IHREP-V10.5



ANALYTICAL REPORT

Workorder: 34-1228246 Client Project ID: Sidney Armory Purchase Order: 013.IH1374.67 Project Manager: Non-Responsive

Analytical Results

Sample ID: 100212-Sidney-05 Media: Ghost Wipe			Collected: 10/02/2012			
Lab ID: 1228246005	Sampling Location: Sidney Armory			05 Sampling Location: Sidney Armory		Received: 10/08/2012
Method: NIOSH 7300 Mod.	Samplin	Prepared: 10/09/2012 Analyzed: 10/09/2012				
Analyte	ug/sample	ug/ft²	RL (ug/sample)			
Lead	11	11	2.5			

Sample ID: 100212-Sidney-06	Media: Ghost Wipe Sampling Location: Sidney Armory Sampling Parameter: Area 1 ft ²			Collected:	10/02/2012
Lab ID: 1228246006				Received:	10/08/2012
Method: NIOSH 7300 Mod.					: 10/09/2012 : 10/09/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)		002010
Lead	2.5	2.5	2.5	*	

Sample ID: 100212-Sidney-07	Media: Ghost Wipe Sampling Location: Sidney Armory Sampling Parameter: Area 1 ft ²			Collected: 10/02/2012						
Lab ID: 1228246007				Sampling Location: Sidney Armory		Sampling Location: Sidney Armory		Sampling Location: Sidney Armory		Received: 10/08/2012
Method: NIOSH 7300 Mod.				Prepared: 10/09/2012 Analyzed: 10/09/2012						
Analyte	ug/sample	ug/ft²	RL (ug/sample)							
Lead	<2.5	<2.5	2.5							

Sample ID: 100212-Sidney-08	Me	9	Collected: 10/02/2012		
Lab ID: 1228246008	Sampling Location: Sidney Armory			2: 1228246008 Sampling Location: Sidney Armory	Received: 10/08/2012
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			Prepared: 10/09/2012 Analyzed: 10/09/2012	
Analyte	ug/sample	ug/ft ²	RL (ug/sample)		
Lead	4.2	4.2	2.5		

Sample ID: 100212-Sidney-Blank	Me	dia: Ghost Wipe		Collected:	10/02/2012
Lab ID: 1228246009	Sampling Loca	tion: Sidney Arm	ory	Received:	10/08/2012
Method: NIOSH 7300 Mod.	Samplin	ng Parameter: An	ea Not Applicable		10/09/2012 10/09/2012
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	The second of	MONTHER.
Lead	<2.5	NA	2.5	-	.¥



ANALYTICAL REPORT

Workorder: 34-1228246 Client Project ID: Sidney Armory Purchase Order: 013.IH1374.67 Project Manager: Non-Responsive

Comments

Sample: 1228246003

NC/CAR-524 was initiated for this sample because approximately 50% to 75% out of the initial volume of sample and a portion of the un-dissolved wipe was lost during digestion due to extremely violent reaction of the sample after Initial aliquot of concentrated nitric acid was added. The remaining digestion was continued with the remaining sample volume per project manager, Stella Hanis. Therefore, the reported lead result for this sample will be biased lower than the actual lead result.

Report Authorization

Method	Analyst	Peer Review	all the
NIOSH 7300 Mod.	Non-Responsive	Non-Responsive	_

Laboratory Contact Information

ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 Phone: (801) 266-7700 Email: alslt.lab@ALSGlobal.com Web: www.alsslc.com

General Lab Comments

The results provided in this report relate only to the items tested.

Samples were received in acceptable condition unless otherwise noted.

Samples have not been blank corrected unless otherwise noted.

This test report shall not be reproduced, except in full, without written approval of ALS.

ALS provides professional analytical services for all samples submitted. ALS is not in a position to interpret the data and assumes no responsibility for the quality of the samples submitted.

All guality control samples processed with the samples in this report yielded acceptable results unless otherwise noted.

ALS is accredited for specific fields of testing (scopes) in the following testing sectors. The quality system implemented at ALS conforms to accreditation requirements and is applied to all analytical testing performed by ALS. The following table lists testing sector, accreditation body, accreditation number and website. Please contact these accrediting bodies or your ALS project manager for the current scope of accreditation that applies to your analytical testing.

Testing Sector	Accreditation Body (Standard)	Certificate Number	Website
Environmental	ACLASS (DoD ELAP)	ADE-1420	http://www.aclasscorp.com
	Utah (NELAC)	DATA1	http://health.utah.gov/lab/labimp/
	Nevada	UT00009	http://ndep.nv.gov/bsdw/labservice.htm
	Oklahoma	UT00009	http://www.deq.state.ok.us/CSDnew/
	lowa	IA# 376	http://www.iowadnr.gov/InsideDNR/RegulatoryWater.aspx
	Florida (TNI)	E871067	http://www.dep.state.fl.us/labs/bars/sas/ga/
	Texas (TNI)	T104704456-11-1	http://www.tceq.texas.gov/field/qa/lab_accred_certif.html
Industrial Hygiene	AIHA (ISO 17025 & AIHA IHLAP/ELLAP)	101574	http://www.aihaaccreditedlabs.org
Lead Testing:			1.184 P
CPSC	ACLASS (ISO 17025, CPSC)	ADE-1420	http://www.aclasscorp.com
Soil, Dust, Paint ,Air	AIHA (ISO 17025, AIHA ELLAP and NLLAP)	101574	http://www.aihaaccreditedlabs.org
Dietary Supplements	ACLASS (ISO 17025)	ADE-1420	http://www.aclasscorp.com





Workorder: 34-1228246 Client Project ID: Sidney Armory Purchase Order: 013.IH1374.67 Project Manager: Non-Responsive

Definitions

LOD = Limit of Detection = MDL = Method Detection Limit, A statistical estimate of method/media/instrument sensitivity. LOQ = Limit of Quantitation = RL = Reporting Limit, A verified value of method/media/instrument sensitivity. ND = Not Detected, Testing result not detected above the LOD or LOQ.

** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

() This testing result is between the LOD and LOQ and has higher analytical uncertainty than values at or above the LOQ.

	245		1. REGULA	R Status	DARM	6
				atus Requested - ADDI		(
6	3			S REQUIRED BY	DATE	۶.
INC FLIG		13 11-12-74	a second s		OR TO SENDING SAMPLES	100117
Date 101.5/12 -	_ Purchase Order No. <u>0</u> NES	17/11/214	. W/	_4. Quote No	A differ to a bolt and a	
	ibleu Street			ALS Project Manage 5. Sample Collection	ef	
Address 1141 0	10109 55630		100000	5. Sample Collection Sampling Site Si	dow Armony	
		onai		Industrial Process	direg antition of	10000
Telephone (910)	on-Resp	01151	VE	Date of Collection	11/2/12	
Fax Telephone (- Andrew Street and Street	10/2/	
E-mail Address						
Billing Address (if uner					ð	
billing Address (il differ	entrion above)			6. How did you first les	No. Contractor	
**************************************				_ o. now and you motive		
	Lana -					
Laboratory Use Only	Client Sample Number	Matrix*	Sample Volume	ANALYSES REQUESTED	0 - Use method number if known	Units
	100212- Sidney-01	GhostWipe	Iso fr.	Lead MasH	1300	13/1
	100212-Sidney-02	1	1	1		1
	100212-Sidney-03					
	100212 - Sidney-04					
	100212 - Skinty - 05					
	100212- Sidney -D6					
	100212 - Sidney -07					1
	100212- SIdney - 08	- d		J J		1
	100212 - Sidney Blan	e V	Ŷ			V
						-
	· · · ·					
			-			
			manage in the second	1 7 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
Specify: Solid sorbent t	ube, e.g. Charcoal: Filter typ	be; impinger sol	ution; Bulk sample	e; Blood; Urine; Tissue; :	Soll; Water; Other	
	tube, e.g. Charcoal; Filter typ ³ 3, ppm 4. % 5. μg/n				Soll; Water; Other In the column entitled Units**	
						0
1. μg/sample 2. mg/m						0
*1. μg/sample 2. mg/m comments	³ 3. ppm 4. % 5. µg/n					
* 1. μg/sample 2. rng/m comments	3 3. ppm 4. % 5. μg/n					
ormments consible Contamination ar . Chain of Custody (Op	³ 3. ppm 4. % 5. μg/n nd/or Chemical Hazards tional)	n ³ 6(c	other) Please in	dicate one or more units		
Contamination ar Contamination ar Chain of Custody (Op telinquished by	3 3. ppm 4. % 5. μg/n	n ³ 6(c	other) Please in	dicate one or more units	In the column entitled Units**	
Comments	³ 3. ppm 4. % 5. μg/n nd/or Chemical Hazards tional)	n ³ 6(c	other) Please in	dicate one or more units 	In the column entitled Units**	
Contamination ar Contamination ar Chain of Custody (Op telinquished by	³ 3. ppm 4. % 5. μg/n nd/or Chemical Hazards tional)	n ³ 6(c	other) Please in	dicate one or more units	In the column entitled Units**	

May, 2018

31,124

12412-

1.

14 ₁₈

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1909 of 1990

A	
Hain E	
a second of	
DEAD	

Industrial Hygiene Southwest

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Sidney Armory - Montana

(Sidney Armory - Montana	ntana				
	HAZARD DESCRIPTION	SITE	RAC	RAC HAZARD COUNTERMEASURE	SUSPENSE	ACTION	Estimated Cost(s)	DATE	REFERENCES
MTSA-100212- 3.4	No asbestos O/M plan or asbestos building survey was available.	Armory	ω.	Create an asbestos Operations & Maintenance Plan and have an asbestos building survey performed by a qualified MT asbestos building inspector					29 CFR 1926,1110; TB MED 513
MTSA-100212- 4.6	Lighting did not provide the required illumination.	Upstairs office (north side), classroom	4	Replace burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.					41 CFR 101-20- 107
MTSA-100212- 4.11.2	There was no fire slarm installed at the facility	Armory	ci	Have a means of alerting employees of a fire installed.					29 CFR 1910.165
MTSA-100212- 4.11.3	Monthly and yearly fire extinguisher inspections were out of date.	Armory	4	Perform monthly and yearly inspections of fire extinguishers as required.					29 CFR 1910, 157(e)

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1910 of 1990

Posted to NGB FOIA Reading Room May, 2018

APPENDIX-N: CONCLUSIONS AND RECOMMENDATIONS

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Sidney Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N is Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Findings and Recommendations; Item 2 – Painted Surface Evaluation).

N3.4 Asbestos Documentation

- Consult with Montana state certified inspector to evaluate the facility for asbestos containing material.
- 2. Develop and implement a written asbestos Operations and Management plan.

N4.6 Illumination Level Monitoring

Replace burnt out bulbs, increase the number of fixtures or number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.

N4.8 Safety Training and Record Keeping

Ensure training of personnel, once personnel have returned to the Sidney Armory.

N4.11 Safety Walk-Through

Perform monthly and yearly inspections of fire extinguishers as required.

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> but check with local Environmental Office.
- 3. Disposable gloves should be treated as hazardous waste.
- 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.

- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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:

 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.

 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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. <u>Please notify your Safety and/or Occupational Health personnel of the</u> 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.

Army National Guard <u>Armory</u> Survey (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Yes. Samples 100213-Sidney-01, 02, 03, 04, 05
Are any weapons cleaned in the facility, if yes where are they cleaned?	No.
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Yes. Samples 100213-Sidney-06, 07, 08.
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	No
Is there any peeling paint ? Take bulk sample if able.	No .
Are there any signs of water damage or mold?	No
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	No.
Quality of housekeeping	Good
HVAC maintenance plan in place?	Field Operation Maintenance controlled at St. Helena Facility.
Overall condition of HVAC system	Good working condition.
Obtained CO2, Temp, RH monitoring	Yes.
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	Yes.
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	All good condition.

1

Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	N/A, no stove.
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	N/A
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	None found
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	No Hazards
Name of Armory, POC, phone #, address and organizations in Armory (Add Checklist to Report)	SidneyArmory Augustina Garcia 2190 West Holly Street Sidney, Montana 59270 406-324-5500 Non-Responsive
	(Add Checklist to Report)

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	Q	Q2	Q3	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04	0			
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05	0			
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06	0			
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are recommended for control	953-01-07	-			
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07	0			
i above	953-01-08			1083	
controlled, that are recommended for control		0			
controlled	953-01-08	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09	0			
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09	0			
Total number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	H			
Total number of DOEHRS-IH shops coded as Priority 1	953-02-10	IHT			
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	H			
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	IHT			
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-12	H			
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	HT			
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	Ħ			
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	H			
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	H			
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	H			

rev 8/2017

Posted to NGB FOIA Reading Room	n
May. 2018	

*

Sidney Armor cidney, Manntan;

BEST AVAILABLE COPY

FY 11 Installation Status Report (ISR) Services Documentation	and and a second s				
	Intellicode	Q1	Q2	Q3	Q4 Annual
Number of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	H			
Number of personnel who required reassessment by industrial hygiene within the last 12 months.	953-02-15	H			
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	IHT	5		
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	Ħ			
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	ΠHI			
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	IHT			
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18	0			
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18	0			
Number of ventilation systems which require corrective action based on deficiencies identified during an IH survey	953-02-19	0			
Number of ventilation systems which were evaluated by an IH	953-02-19	0			
Number of design review packages evaluated and addressed by an IH with recommendations applicable to occupational health concerns	953-02-20	Ħ			
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	IHT			



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam • Hawaii • California • Oregon • Washington • Nevada • Arizona • Idaho • Utah • Wyoming • Montana • New Mexico • Nebraska

Industrial Hygiene Site Assistance Visit

1956 Mt Majo Street Helena, MT 59604 31 Oct 2012

Womak Armory

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1920 of 1990



DEPARTMENT OF THE ARMY AND AIRFORCE NATIONAL GUARD BUREAU INDUSTRIAL HYGIENE SOUTHWEST 10510 Superfortress Ave, Ste, C Mather, CA 95655

ARNG-CSG-IHSW

25 March 2013

MEMORANDUM THRU Montana Army National Guard, ATTN: Non-Responsive Medical DET, Troop Medical Clinic, RM 1009, 1956 MT Majo Street, Fort Harrison, MT 59636-4789

FOR Commander, Womak Armory, 1956 Mt Majo Street, Helena, MT 59604

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Womak Armory 1956 Mt. Majo Street, Helena, Montana conducted on 31 October 2012.

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Site Assistance Visit and cursory review of safety related items and programs was conducted at the Womak Armory at 1956 Mt. Majo, Womak, MT on 31 OCT 2012.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the contractor report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached contractor report.

c. Risk Assessment Codes (RAC) provided in this report have been derived from two sources: Deriving Risk Assessment Codes (RAC's) for Health Hazards (Ref: DOD Instruction 6055.1) and AR 385-10, The Army Safety Program.

d. Use of trademark names in the attached report, or this Executive Summary, does not imply Army National Guard endorsement of any product.

3. Findings. See survey report.

4. Commendable.

a. The facility was generally clean and orderly and personnel were helpful during this SAV.

5. Observations / Recommendations.

NOTE: This section provides conclusions and recommendations for the findings and observations made within the attached contractors report. The paragraphs are numbered to correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

a. A building inspection of the armory for asbestos, should be provided and a management plan in place for personnel working at and on the facility should be written from that inspection (para.4.4)(RAC 4)

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1921 of 1990

ARNG-CSG-IHSW

BEST AVAILABLE COPY

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Womak Armory 1956 Mt. Majo Street, Helena, Montana conducted on 31 October 2012.

b. Record fire extinguishers inspections which should be done monthly and annually with documentation on extinguisher. (para. 4.10) (RAC 3)

c. Add more task lighting or brighter light bulbs to the existing light fixtures to increase the illumination level on all areas of the drill floor to at least 30 foot candles (FC). (para. 4.6) (RAC 4)

6. Violation Correction Log.

a. IHSW has provided a Violation Correction Log derived from the observations from this visit. IHSW recommends the following:

 Commander(s) assign an Action OIC/NCOIC, Suspense Date for completion, and Estimated Cost(s) to ensure item completion and corrective status is briefed during quarterly (or monthly) Safety Meetings/Councils until resolved.

Corrective measures should be implemented and accomplished at the lowest levels possible.
 Hazards and Corrective Measures that cannot be corrected at the facility level, and require assistance from higher headquarters or from the state level, should be elevated to the Quarterly State/BN Safety Council Meeting for resolution.

 Recommend a representative from the facility attend all quarterly/monthly meetings to ensure the appropriate emphasis and corrective actions are followed for hazard resolution and abatement of the observations made during this visit.

4. Retain entries of the items corrected, or closed, for future reference. This may be accomplished by posting completed items within the Corrected Hazard Sheet portion of the Excel Violation Correction Log Workbook we've provided.

5. The preferred method to document and track identified hazards for resolution is for their entry into the Reserve Component Automation System – Safety and Occupational Health (RCAS-SOH) Program.

 b. IHSW recommends further program refinement through written documentation for standardized guidance to the personnel performing the processes. Conducting Hazard Assessments consistent with 29 Code of Federal Regulations (CFR) 1910.132, General Requirements for Personal Protective Equipment and AR 40-5, Preventive Medicine, would provide this continued program refinement.

7. Hazard Assessment/Job Safety Analysis (JSA).

a. Documenting the Hazard Assessments provides a method to obtain initial and periodic review from the Industrial Hygiene, Occupational Health and Safety Professions located at the JFHQ/HQ/state level.

b. The Hazard Assessments should be used as written training materials for the new, transfer and unit personnel working under the auspice of the facility.

c. IHSW recommends facility supervisory staff and facility personnel conduct initial Hazard Assessments outlined in AR 40-5, Army Preventive Medicine (Section V) and 29 CFR 1910.132

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1922 of 1990

ARNG-CSG-IHSW

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Womak Armory 1956 Mt. Majo Street, Helena, Montana conducted on 31 October 2012.

and submit for review and obtain approval from the state Industrial Hygiene, Occupational Health and Safety Professions.

d. We have provided an appendix with Hazard Assessments (HA) examples of some of this facilities operations. Additional operations can utilize this format to design HA not observed during this SAV.

e. An integral and important factor of the Hazard Assessment/JSA process is for the review and guidance from qualified Safety, Occupational Health and Industrial Hygiene professions located at the higher headquarters level or state level. For this reason, the Hazard Assessments (to include all pertinent and supporting documents) should be completed by the facility personnel and forward to the Montana Army National Guard Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

Job Safety Analysis (JSA's)/Hazard Assessments.

NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

8. IHSW recommends the Senior Unit Commander of this Facility and any Co-Tenant Organizations or Units, review and provide assistance with implementation of these recommendations. This will educate the chain of command and allow the unit or co-tenant organizations to take any necessary precautions or actions required by them and their personnel.

9. To assist you with execution of your responsibilities in correcting the observations noted, we encourage you to consult with the State Safety Manager, Occupational Health Manager and Industrial Hygiene professions located and/or authorized within the State Safety and Occupational Health Office.

10. For additional information please contact the undersigned at (916) 854-1491 or via email at

Non-Responsive

Non-Responsiv

NGB, IHSW, CIV Industrial Hygiene

BEST AVAILABLE COPY

				Ĵ
E	7		1	à
Ę	Ľ	-		ş
- 3	Q	1	12	r

Industrial Hygiene, Southwest Violation Inventory Log Womak Armory - Helena MT

SITE Armory	RAC	HAZARD COUNTERMEASURE	SUSPENSE	ACTION	Estimated	DATE	
Armory				Contraction of the second second	Cost(s)	CORRECTED	
	*	Maintain copies of the Asbestos Operations & Maintenance Plan at the Armory.		×			29 CFR 1910.1001()
Armory	*	Consult with a Montana state-certified asbestos inspector to determine if the floor tiles contain asbestos.	-				29 CFR 1910.1001(])(8)
Armory	4	aintain temperatures within ASHRAE commended values.					ASHRAE Standard 55-1992
Armory	4	eplace the burnt out bulbs, increase the imber of fixtures or number of bulbs per dure, change to a more effective lighting type, paint the walls a more reflective color.					41 CFR 101-20-107
Armory	e 202	spect all fire extinguishers monthly and ocument inspection date, and inspectors gnature on the inspection tag.					29 CFR 1910.157 (e)(2)
	mory mory	4 4 6 00	4 4 6 00	4 4 6 0	4 4 6 00	4 4 6 00	4 4 6 00

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1924 of 1990

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
- Large barrel (55 gal.) to store wastewater in after changing out of dirty scrub water. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> requirements may be reduced after it has been determined non-hazardous levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- Final rinse should be with clean water only -after mop heads have been cleaned.

<u>Recommended Follow-up Housekeeping Practices</u> 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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*)
 - 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. <u>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.</u>

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.

Industrial Hygiene Site Assistance Visit Womak Armory Clackamas, Oregon 31 October, 2012





www.nesglobal.net

Posted to NGB FOIA Reading Room May, 2018



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1929 of 1990

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

WOMAK ARMORY 1956 Mt. Majo Street Fort Harrison, Helena, Montana 59604

October 31, 2012

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, California 95630

NES Job Number: 013.IH1374.74

Prepared by:



Reviewed by:



Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1930 of 1990

Table of Contents

1.0	INTRO	DDUCTION			
	1.1	IHSAV Objectives			
	1.2	Scope of Work			
2.0	PROC	ESS DESCRIPTION			
3.0	METH	10DS4			
	3.1	Lead Wipe Sampling4			
	3.2	Painted Surface Evaluation			
	3.3	Water Damage and Limited Visual Fungal Growth Evaluation			
	3.4	Asbestos Documentation			
	3.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality 4			
	3.6	Illumination Level Monitoring			
	3.7	Hazardous Material Storage and Use Procedures			
	3.8	Safety Training and Record Keeping			
	3.9	Ventilation Survey			
	3.10	Sound-Level Measurements			
	3.11	Safety Walk-Through6			
	3.12	Equipment Used			
	3.13	Quality Assurance			
4.0	FINDINGS AND RECOMMENDATIONS				
	4.1	Lead Wipe Sampling			
	4.2	Painted Surface Evaluation			
	4.3	Water Damage and Limited Visual Fungal Growth Evaluation			
	4.4	Asbestos Documentation			
	4.5	Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality9			
	4.6	Illumination Level Monitoring			
	4.7	Hazardous Materials Inventory & Material Safety Data Sheets (MSDS) 10			
	4.8	Flammable Storage Cabinets			
	4.9	POL Storage10			
	4.10	Safety Training and Record Keeping			
	4.11	Ventilation Survey			
	4.12	Sound-Level Measurements			
	4.13	Safety Walk-Through			
5.0	PROJECT LIMITATIONS				
6.0	PROJ	ECT APPROVAL			

Appendices

Appendix A References Appendix B Assessment Criteria Appendix C Photo Log Appendix D Chemical Inventory Floor Plan /IAQ - Temp, RH, & CO2 Monitoring Appendix E Appendix F Ventilation Data Appendix G Field Notes Appendix H Calibration Certificates Appendix I Air Sampling & Metal/Lead Wipe Tables Appendix J Laboratory Reports Appendix K Employee List Appendix L IHSW Violation Inventory Log Appendix M Hazard Assessments Appendix N Recommendations Appendix O DD Forms 2214 Appendix P IHSW Lead-Cleanup SOP Appendix Q Facility Information Worksheet Appendix R Installation Status Report (ISR) Appendix S Noise Dosimetry Data Appendix T Additional Supporting Documentation

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 NES, Inc. NES Job Number: 013.IH1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1932 of 1990

EXECUTIVE SUMMARY

On October 31, 2012, Certified Industrial Hygienist (CIH), of NES, Inc. (NES) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Womak Armory located at 1956 Mt. Majo Street, Fort Harrison in Helena, Montana. The primary point of contact for information gathered during this survey was **Non-Responsive** may be reached by phone at (406) 324-3656 or by email at **Non-Responsive**

The objectives of this IHSAV were to perform the following activities:

- · Evaluate configuration of battery storage and charging facilities;
- Review hazardous material storage and use procedures;
- Review the Respiratory Protection Program and respirator use/storage;
- Collect area and breathing zone air samples;
- · Collect metal surface wipe samples;
- Measure the volumetric flow of local exhaust ventilation systems;
- Monitor employee noise exposures through noise dosimetry and source measurements;
- Measure illumination levels;
- · Collect indoor air quality data;
- · Evaluate any existing safety hazards; and,
- Review safety policies/programs, training, and record keeping.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest - Violation Inventory Log located in Appendix L of this report.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary, such as task descriptions, work space locations, regulatory requirements, and additional recommendations.

Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: Non-Responsive vent above and beyond expectations to help NES complete the IHSAV. His responsiveness and assistance were greatly appreciated.

IHSAV Womak Armory Helma, Montana Posted to NGB FOIA Reading Room May, 2018 Page 1 of 13

NES, Inc. NES Job Number: 013.IH1374.74

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1933 of 1990

1.0 INTRODUCTION ·

On October 31, 2012, Certified Industrial Hygienist (CIH), of NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Womak Armory located at 1956 Mt. Majo Street, Fort Harrison in Helena, Montana. The primary point of contact for information gathered during this survey was **Non-Responsive** may be reached by phone at (406) 324-3656 or by email at **Non-Responsive**

1.1 IHSAV Objectives

The objective of the IHSAV is to evaluate the occupational environment of the administrative areas in the Armory, to determine the presence of operational health and safety risks and make recommendations for corrective actions or follow-up work to assist the Army National Guard in managing those risks.

1.2 Scope of Work

To achieve the above objectives at this facility, the survey included the following work:

- Collect lead wipe samples;
- Evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- Inspect the interior rooms of the armory for water damage and the presence of fungal growth;
- Review asbestos survey and assessment files and determine if documentation of asbestos awareness training is current;
- Evaluate the condition of the Heating, Ventilation, and Air-Conditioning system and collect indoor air quality data;
- · Review hazardous material storage and use procedures;
- Review safety training, and record keeping;
- Perform a ventilation survey on the kitchen stove hood (if present);
- · Perform a noise survey on the kitchen appliances; and,
- Conduct a safety walk-through evaluation and note any existing safety hazards.

Page 2 of 13

NES. Inc. NES Job Number: 013.IH1374.74

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1934 of 1990

2.0 PROCESS DESCRIPTION

The Womak Armory has three full time military personnel. The three full time personnel are Readiness NCO NOn-Responsive upply NCC Non-Responsive and the Training NCO Non-Responsive The military units that utilize the facility are the 163rd Combined Arms Battalion and the E 145th Forward Support Company. Various civilian clubs occasionally rent out the facility as well. The Armory has offices used for administrative purposes and also contains a drill floor, storage rooms, and a kitchen converted into a break room. The drill floor and the publications library area are occasionally used by Army National Guard members as a staging area to clean weapons.

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 Page 3 of 13

NES, Inc. NES Job Number: 013.IH1374.74

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1935 of 1990

3.0 METHODS

3.1 Lead Wipe Sampling

Lead wipe samples were collected on horizontal work and floor surfaces in various locations throughout the facility. Ghost Wipe[™] brand wipes were used by wiping a one square foot template. The collected wipe samples were placed in clean and labeled centrifuge vials. Samples were submitted to ALS Environmental Laboratories located in Salt Lake City, Utah for analysis, using NIOSH method 7300. The wipes used conform to American Standards for Testing Materials (ASTM) E1792, Standard Specification for Wipe Sampling Materials for Lead in Surface Dust. See Appendix I, Table 1 for a table of analytical results. See Appendix J for laboratory reports.

3.2 Painted Surface Evaluation

The interior and exterior of the Armory was visually inspected for peeling paint. Paint chip samples, if collected, are submitted to ALS Laboratory Group (ALS) in Salt Lake City, Utah. ALS analyzes the samples for lead using NIOSH 7300 modified method.

3.3 Water Damage and Limited Visual Fungal Growth Evaluation

The interior of the Armory was visually inspected for water damage and subsequent fungal growth resulting from moisture. Any water impacted areas noted were documented on the facility map for a follow-up evaluation.

3.4 Asbestos Documentation

An evaluation of asbestos documentation was performed. This evaluation consisted of determining if an asbestos survey and assessment have been performed and if there is an asbestos operations and maintenance plan in place.

3.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

An evaluation of the heating, ventilation, and air-conditioning systems that serve the Armory was accomplished. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system was performed to note any obvious operational problems.

Carbon dioxide (CO₂), temperature, and relative humidity were measured using a TSI IAQ-CalcTM, model 8551. The unit was calibrated before use with certified zero gas and 1,000ppm CO₂ span gas. Carbon dioxide measurements are often used as a screening technique to

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 Page 4 of 13

NES. Inc. NES Job Number: 013.IH1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1936 of 1990

evaluate whether adequate quantities of outdoor air are being introduced and evenly distributed to interior occupied spaces. Human occupants produce CO₂, water vapor, and other bioeffluents. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2010, *Ventilation for Acceptable Air Quality*, recommend maintaining CO₂ below a concentration that is 700 parts per million (700 ppm) above outdoor levels. Outside CO₂ concentrations are typically about 350 ppm. Providing sufficient ventilation to maintain steady-state CO₂ concentrations at this level will assure that a substantial majority of people entering a space will be satisfied with respect to human bioeffluents (body odors). ASHRAE also recommends an outside air supply rate of 20 cubic feet per minute (20 cfm) per building occupant in office spaces, and, at that ventilation rate, CO₂ concentrations should not increase over time. Outside air supply rates were not measured during this IHSAV since CO₂ concentrations were within an acceptable range. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.6 Illumination Level Monitoring

Illumination measurements were taken throughout the Womak Armory. The instrument used for the illumination survey was a Konica Minolta Illuminance Meter, model TL-1. Measurements taken were obtained at typical working locations such as desks, computers, workstations and general working areas.

3.7 Hazardous Material Storage and Use Procedures

A review of the Armory's chemical inventory and material safety data sheet (MSDS) file was accomplished. Chemical storage areas, including flammable storage cabinets/rooms were also inspected as part of this IHSAV.

3.8 Safety Training and Record Keeping

An inspection of the Armory's training programs and training documentation was performed to determine if the site specific training programs and annual documentation is current.

3.9 Ventilation Survey

Air velocity and flow measurements are measured on the kitchen ventilation hoods, when present and operational, using a TSI VelociCalc, model 8386A. Results are evaluated for compliance with TM 5-810-1, prepared by Headquarters, Department of the Army, June 1991 which sets a criteria of 50 feet per minute (fpm) for open hood sections and 75 (fpm) for grease filter sections, measured at the horizontal hood opening.

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 Page 5 of 13

NES, Inc. NES Job Number: 013.IH1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1937 of 1990

3.10 Sound-Level Measurements

Sound-level measurements are made on kitchen appliances, when operational; using a Quest Sound-Level Meter, model 2900 in the A-weighted decibel (dBA) range, using a slow meter response. Copies of annual calibration certificates for these instruments are located in Appendix H. DD Forms 2214 are provided in Appendix O.

3.11 Safety Walk-Through

A safety walk-though evaluation of the Armory was performed to document the presence of a fire alarm, to determine if fire extinguishers are properly mounted and are current on their monthly and annual inspections, ground fault circuit interrupter (GFCI) testing, if eyewash stations inspections are current, and to document any fire or safety hazards in the Armory.

3.12 Equipment Used

Туре	Model Number	Serial Number	Calibration Date
Quest Sound Level Meter	2900	CDF020012	March 2012
TSI IAQ-Calc [™] Meter	8551	51380	November 2012
Konica Minolta Light Meter	TL-1	279029	May 2012
TSI VelociCalc [™] Plus Meter	8386A	84110581	March 20212

The following equipment was used for this survey.

Please see Appendix H for a complete inventory of calibration certificates that may have been used during this IHSAV.

3.13 Quality Assurance

NES employs, at a minimum, the following methods to help assure quality of field investigations and reports:

- Use of appropriately educated and experienced personnel;
- · Documentation of pertinent field and sampling information;
- Continuing education of technical personnel through attendance at training sessions and conferences, and literature review;
- Peer and supervisory review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to method requirements, in particular to NIOSH and OSHA, standard methods, including strict chain-of-custody protocol;

Page 6 of 13

NES. Inc. NES Job Number: 013.1H1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1938 of 1990

- Use of accredited laboratories, or, in cases where specific accreditation is not available, choice of laboratories of good reputation, having strong QA/QC programs; and,
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 Page 7 of 13

NES. Inc. NES Job Number: 013.IH1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1939 of 1990

4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Wipe Sampling

Wipe samples for lead dust, were collected from horizontal surfaces in selected representative areas of the Womak (Helena) Armory to determine if housekeeping efforts are successful. The US Department of Housing and Urban Development (HUD), recommends a 40 micrograms per square foot ($\mu g/ft^2$) as a clearance level for floors (includes carpeted and uncarpeted floors). This guideline was established to prevent lead exposure to children in domestic and public facilities. This criterion is applied to any areas of a facility that may be used by the public for nonmilitary functions. These areas include: converted indoor firing ranges; drill halls; locker rooms; class rooms; and fitness areas. Areas of a facility which are not specifically listed are expected to be, "maintained as free as practicable of accumulations of lead," as specified by the Occupational Safety & Health Administration (OSHA) in 29 CFR 1910.1025 (h)(1). The Army National Guard has determined lead concentrations less than 200 $\mu g/ft^2$ is practicable for maintenance type facilities. This criterion is applied to areas such as maintenance bays, and tool rooms, which are not routinely accessible to the general public.

A total of nine Ghost Wipe[™] lead samples were collected during the time of the IHSAV. The first five samples were collected from the center and the four corners of the drill floor surface areas.

Additional lead wipe sampling was taken from approximately 25% of the rest of the building. The four additional samples were collected from the following areas: table top in the publication library; table top in the break room; supply room floor; and, the back hallway floor. The analytical results are provided in the table below.

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG/HUD Standard (µg/ft ²)
103112-Womak-01	Drill Floor	Floor - Northwest corner	11	≤ 40
103112-Womak-02	Drill Floor	Floor - Northeast corner	6.6	≤40
103112-Womak-03	Drill Floor	Floor - Center	7.7	≤40
103112-Womak-04	Drill Floor	Floor - Southwest corner	27	≤40
103112-Womak-05	Drill Floor	Floor - Southeast corner	23	≤40
103112-Womak-06	Publication Library	Table top	15	≤40
103112-Womak-07	Break Room	Table top	23	≤ 40
103112-Womak-08	Supply Room	Floor	17	≤40
103112-Womak-09	Back Hallway	Floor	5.9	≤ 40

Page 8 of 13

NES, Inc. NES Job Number: 013.1H1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1940 of 1990

4.2 Painted Surface Evaluation

Peeling paint was not observed in the interior or on the exterior of the facility. Therefore no paint chip samples were collected for analysis. The painted surfaces of the facility were in good repair.

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

During the inspection of the facility no water damage was observed on the first floor of the Womak Armory. The second floor was not accessible at the time of the IHSAV and was not inspected.

4.4 Asbestos Documentation

Chris Denning, with the State of Montana's Facilities Management Office (FMO), indicated that he has an asbestos building survey and a written asbestos operations and maintenance plan on site.

The floor tiles in the building are suspected asbestos containing material. The tiles were in good repair and a sample was not able to be collected during the IHSAV.

4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality

The armory's HVAC systems were all functioning with no visual defects of damage observed. No maintenance plan or inspection documentation could be produced at the time of the IHSAV. We were advised that the FMO maintains all documentation of building HVAC systems at Ft. Harrison.

The average outdoor carbon dioxide concentration at the time of the survey was approximately 401 ppm; therefore, the maximum indoor CO_2 level recommended by the ASHRAE Standard would be 1,101 ppm. Carbon dioxide concentrations throughout the facility were lower than 1,101 ppm. The highest CO_2 concentration measured was 377 ppm in the drill floor.

ASHRAE recommends maintaining temperatures between 68 and 75°F. Relative humidity should be maintained between 30% and 60% to minimize the growth of allergenic or pathogenic organisms. Building air temperatures, ranged from 63.3 to 68°F, and are below ASHRAE's recommended temperature range. Relative humidity measured between 28.6 and 33.2% during the IHSAV. Some of the relative humidity values are below ASHRAE's recommended range, and are a concern for personal comfort rather than allergenic or pathogenic organisms.

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 Page 9 of 13

NES, Inc. NES Job Number: 013.1H1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1941 of 1990 Please see Appendix E for IAQ data.

4.6 Illumination Level Monitoring

Illumination levels were measured throughout the facility. The numbers represent the illumination level in foot-candles (FC). In general, the measurements were taken at task surface level, such as on desks or work benches. Measurements not taken on a desk or workbench were taken at waist level.

The illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations. In general, 50 FC is the minimum lighting requirements for the performance of tasks where reading is required, 30 FC is required for work areas where reading is not required, 10 FC is required for non-work areas, such as aisles and corridors, and 5 FC is required for walking surfaces, such as mechanical spaces.

Based on the above criterion, the lighting on the drill floor is inadequate for tasks performed. The illumination levels in the drill hall ranged from 14 to 17 FC. See Appendix E for a table of IAQ results.

4.7 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS)

Inventories of all hazardous materials used by the Armory along with their associated Material Safety Data Sheets (MSDSs) are maintained in a master binder. Inventories and MSDSs are also maintained in separate binders at each satellite storage location. The master chemical inventory and MSDS binder is arranged by shelf location number (SLN), national stock number (NSN) and by manufacturer. Copies of chemical inventories are provided in Appendix D.

4.8 Flammable Storage Cabinets

There are three flammable storage cabinets used for hazardous material storage in the Publication Library of the Womak Armory. These flammable cabinets were inspected and no storage incompatibilities or leaking materials were found. The cabinets were in good condition and all doors were noted to close properly.

4.9 POL Storage

Not applicable to the facility as stated b

Page 10 of 13

NES, Inc. NES Job Number: 013.IH1374.74

Helena, Montana Posted to NGB FOIA Reading Room May, 2018

IHSAV

Womak Armory

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1942 of 1990

4.10 Safety Training and Record Keeping

The following training documentation was found at the site:

- Employee Hearing Medicals Completed June of 2012
- Fire Prevention Plan, Emergency Egress Maps Posted
- Hazardous Material Waste Training
- Spill Prevention and Response & Practice Exercise

4.11 Ventilation Survey

The kitchen has been converted into a break room for use by personnel. Food is not prepared for troops in this area. There were no operating exhaust ventilation systems to evaluate during the IHSAV.

4.12 Sound-Level Measurements

The kitchen appliances are not being used. No sound-level measurements were collected from within the armory during the IHSAV. No activities other than administrative were in progress at the time of the IHSAV.

4.13 Safety Walk-Through

- 1. Housekeeping throughout the facility was good.
- Fire extinguishers are strategically located throughout the Womak Armory. All extinguishers were up to date for annual inspections. Action Fire Extinguisher Service is contracted to perform annual fire extinguisher inspections; however, there was no evidence of monthly fire extinguisher inspections.
- 3. There weren't any emergency eyewash stations on site.
- 4. Second story building access was not available at the time of the IHSAV.
- The fire evacuation plan is documented, visual throughout the building and seems to be communicated to all personnel. Egress routes are marked on the fire evacuation plan. There is no fire alarm system currently installed in the Womak Armory.

IHSAV Womak Armory Helena, Montana Posted to NGB FOIA Reading Room May, 2018 Page 11 of 13

NES. Inc. NES Job Number: 013.IH1374.74

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1943 of 1990

5.0 PROJECT LIMITATIONS

This Project was performed using, as a minimum, practices consistent with standards acceptable within the industry at this time, and a level of diligence typically exercised by industrial hygiene and environmental consultants performing similar services.

The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. Where sample collection and testing have been performed, Company professional opinions are based in part on the interpretation of data from discrete sampling locations that may not represent conditions at non-sampled locations. Company assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of Company, or from omissions or errors in public records.

Furthermore, it is emphasized that the final decision on how much risk to accept always remains with the client since Company is not in a position to fully understand all of the client's needs. Clients with a greater aversion to risk may want to take additional actions while others, with less aversion to risk, may want to take no further action.

6.0 PROJECT APPROVAL

This IHSAV was reviewed and approved by:



March 27, 2013 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **Non-Responsive** of the Southwest Regional Industrial Hygiene Office, 916-804-1707. Contact the State Safety Officer and Occupational Health Office and/or the Regional Industrial Hygienist should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

Page 13 of 13

NES. Inc. NES Job Number: 013.1H1374.74

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1945 of 1990

APPENDIX A

REFERENCES

- American Conference of Governmental Industrial Hygienists (ACGIH), Industrial Ventilation, A Manual of Recommended Practice
- American Conference of Governmental Industrial Hygienists (ACGIH), Threshold Limit Values for Chemical Substances and Physical Agents and Biological Indices
- American National Standards Institute (ANSI)/Illuminating Engineering Society (IES), Industrial Lighting.
- American National Standards Institute, Z358. 1-1998. Emergency Eyewash and Shower Equipment
- AR 40-5, Preventative Medicine
- AR 40-10, Appendix B Health Hazard Assessment Program in Support of Army Material Acquisition Decision Process
- AR 385-10, The Army Safety Program
- Corps of Engineers Guide Specification, CEGS-1585 1, Overhead vehicle tailpipe (and welding fume) Exhaust Systems

DA PAM 40-ERG, Ergonomics

DA PAM 40-501, Hearing Conservation.

National Safety Council, Fundamentals of Industrial Hygiene

NOR 385-10, Army National Guard Safety and Occupational Health Program

- TB MED 503, The Army Industrial Hygiene Program
- TG022, US Army Environmental Hygiene Agency (USAEHA), Industrial Hygiene Evaluation Guide
- TG 141, US Army for Health Promotion and Preventive Medicine (USACHPPM) Industrial Hygiene Air Sampling Guide, Nov. 1997
- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards

APPENDIX B

ASSESSMENT CRITERIA

A. Ventilation Standards

Ventilation rates were compared to recommendations made in 29 CFR 1910, ACGIH Industrial Ventilation Manual, and Corps of Engineers specifications. See Appendix A for reference information.

B. Illumination Standards

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991 Standard and MIL-STD¬1472E.

C. Noise

Noise measurements were taken and compared with OSHA Standard 29 CFR 1910.95 and Department of the Army Pamphlet 40-501.

D. Air Sampling

Personal air sampling was conducted in compliance with applicable NIOSH Analytical Methods. Sampling results were compared to relevant Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV), or National Institute of Occupational Safety and Health (NIOSH) Recommended Exposure Limits (REL).

Occupational Safety and Health Administration (OSHA)

OSHA has established Permissible Exposure Limits (PELs) for workplace toxic and hazardous substances listed in 29 CFR 1910.1000 Table Z-1. Most OSHA PELs are based on 8-hour time weighted averages (TWAs); when sampling periods differ from 8 hours, the result must first be converted to an 8-hour TWA before comparing it to the OSHA PEL. Some OSHA PELs are based on Short Term Exposures Limits (STEL) of 15 minutes of worst case exposure or Ceiling Limits of worst case peak exposures (sampled as a 15 minute exposure if direct-reading methods are not available).

OSHA regulations are legally enforceable. Employers are required to maintain employee exposures below PELs. The best practice is to eliminate hazards and use safer substitutes. Alternatively, engineering and/or administrative (work practice) controls may reduce exposures to acceptable levels. Personal protective equipment should be the solution of last resort, implemented after all other efforts to eliminate the hazard have been exhausted or deemed infeasible. OSHA 29 CFR 1910.134 covers the use of respiratory protection in the work place.

American Conference of Governmental Industrial Hygienists (ACGIH)

Unlike the OSHA PELs, the ACGIH TLVs are not consensus standards; however, TLVs represent a scientific opinion based on a review of existing peer-reviewed scientific literature by committees of experts in public health and related sciences.

Occupational Exposure Limit

In accordance with the Department of the Army (DA) Pamphlet 40-503, Industrial Hygiene Program (DA PAM 40-503), "The DA mandates the use of ACGIH TLVs when they are more stringent than OSHA regulations or when there is no PEL." The DA defines the resulting exposure limit as the Occupational Exposure Limit (OEL).

BEST AVAILABLE COPY PHOTO LOC

WOMAK ARMORY HELENA, MONTANA OCTOBER 31, 2012



Photo 1: Womack Readiness Center (Armory) front sign.



Photo 2: Montana National Guard sign located in front of the facility.

BEST AVAILABLE COPY PHOTO LOC

WOMAK ARMORY HELENA, MONTANA OCTOBER 31, 2012

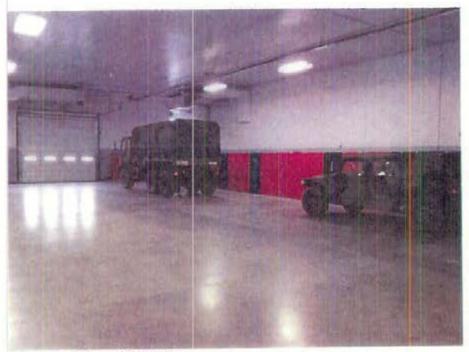


Photo 3: View of drill floor area.

Posted to NGB FOIA Reading Room May, 2018

	Facility Name:		Location: Cabiet #2	#1			
a)N IS	PRODUCT NAME ⁽²⁾	NSN/Part Number ⁽³⁾	Manufacturer ^{M)}	WSDSID ⁽⁸⁾	QTY ⁽⁶⁾	Unit of Issuem	Shelflife Code ¹⁶⁾
CONTLO	(1)hite Sa	200	skill craft		51	Ge	
501165	Nesert Tay So		Skillconft		16	Ea	
6	1) Hite Dam onit	7570-00-419-95-64	So-Suce		11	Ea.	
	Black men	0164-6910-00-015t	SA-Swee.		0	Fa.	
Xadit	() +++ + 1	8010-01-331-61060	Skilloraft		1	Ea.	
Daver Rol	chen mart	\$010-81-331-6109	Skillcraft		0	Eo.	
R. W. W. W.		Scho-01-363-3373	Crigas saint of Danish	om o	1	Ea.	
DANK W.C.		\$010-01-331-611.3	Skitte calt		1	Fa	
1.00	is olive	8010-01-331-6 III	Skilloraft		1	Fo.	
Davers	1 8	9040-01-040-0947	Rulruhe Ic.		2	En	
1 7	Auto to a	PN IDINCOR	0		-	Ea	
LI-BIL-E& CONTONIO CIOSS	Closs Rlack		Kimball Midurest		-	Ea	
7.5210	orest Sucher not I even War	PN 82-1450-02	Richthers		6	Ea	1
1996000		m m	1		(n	Ea	
Paren	Poreso Privar Duster	7930-01-998-24 73			3	Ea	
DORGE	bases Starting Fluid	PN RISTSILO	Spraw Products		5	Ea	
and Ce	8	9150-01-035-5392	CSD'INC		0-	Ea	
Date:		nventory Performed by:			Рад	Page L of 3	1
(1) Shelf	Location Number.	(6) HMIF	35 MSDS Serial Number				
(3) Nation (4) Manut	 (2) Product Name (3) National Stock Number (4) Manufacturer Name 	(0) Unit (1) Unit (2) Shell	(7) Unit of issue-BT-Botile, DM=Drum, CN=Can, BX=Box (8) Shelf Life Extension code or Number of Months to Extend	CN=Can, BX=Bc	xx thend	П	

Hazardous Material Storage Inventory Form

Chapter 2 - Managing Hazardous Materials

April 2010

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1951 of 1990

2-39

.74

ME ⁽²⁾ NSNIPart Number ⁽²⁾ ME ⁽²⁾ NSNIPart Number ⁽²⁾ 	Siorage Location: Cabinet # 1. Manufacturer (9) MSDSID ⁽⁵⁾ ShB Consultants Let A Castrol Enc.		
ME ⁽³⁾ NSNIPart Number ⁽³⁾ 			_
11-116000 9150-00-657-4441 -111076-1111, 2150-00-592-9689 11-PAE-3220 6850-00-224-6658 674160N2 AMD. 6 9150-00-224-6658 11.1126 hield 2015.00-1216-22755 11.1126 hield 2015 6850-00-224-6653 241,000 AMI - 9150-01-054-64153 241,000 AMI - 9150-01-054-64153	1 Fac.	QTY ⁽⁵⁾	Unit of Sheitific Issue ^[7] Code ⁽³⁾
11-141076-1412 9150-00-222-9689 11-PRE-5320 6850-00-224-6458 16 74640 Nr mm. 10 9150-01-055-6488 01464646 16850-00-926-22757 6241000 Aat 958-01-102-144 6241000 Aat 958-01-102-1473	LEic.	~	Ea
11-PAR-3720 6850-00-224-14658 (50 TO 67440 N minula 1450-01-057-14688 (50 T 11464 hald 16857)-50-926-22755 RITE 241000 ANI 950-01-05444 Klend 241000 ANI 950-01-054443 Roules -		-	Ea
10 Files No. 101. 10 Just - 01. 057-1488 (5) I indebied 10 10857 - 500-9210-2275 - RITE PU OM5-444 - Release Sthoon ANI- 950-01-05443 - Bankes- Sthood ANI- 950-01-05443 - CSD -			Ea
Marchield 10850-50-9216-22755 Rite	460	1gal	Ga .
24600 ANI - 950-01-02-1473 34600 ANI - 950-01-02-1473 346006 ANI - 6 9150-01-054-6453	-KEN T.C.	12	Eo
24400 ANI- 9150-01-102-1473 346006 ANI- 6 9150-01-024-6153	ĺ.,	-	Ee.
1. 6 9150-01-054-16153	Free Tac		Box
CD. 925-1176	100	294	Ea
CTH-CCL+CT	4	2	Ea
10-(inter) 2930-01-326-8110 5	act.	2	Eái
-4000 R 9150-00-861-3522	of Lac	2	Ea
1.ens (longer 6850-00-592-9751	Telechen International	3	Bax
601. MILL-634140 C PL) 105-130	Free	_	Ea
9150-01-079-6129	TAS	-	Ea
thing was	place	7	Ea
1 2000 21 21):2009	arc'	1	Ea.
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	uest	1	Ea.
Inventory Performed by:		Page Z	2_ of 3_
(1) Shelf Location Number.	ertal Number		Π
	b) Quernity present at airled of although of a control of		

April 2010

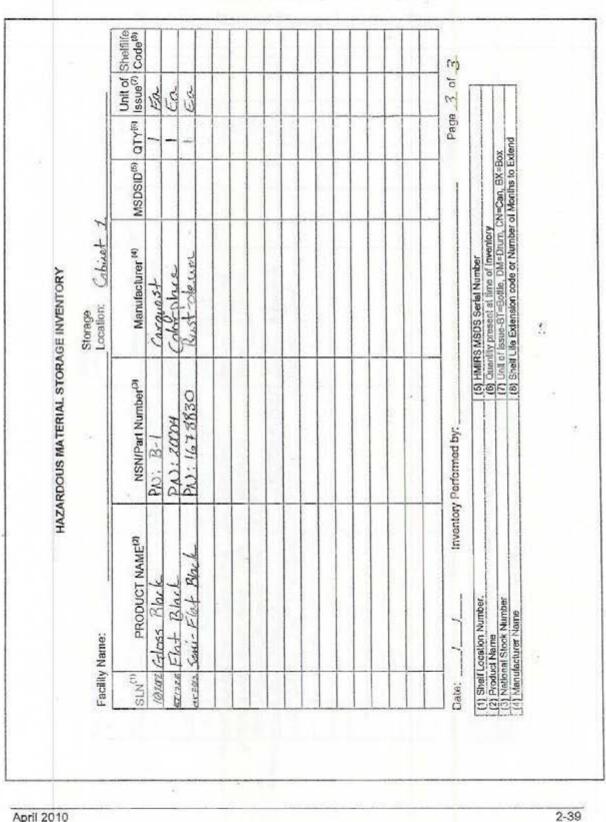
Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1952 of 1990

2-39

BEST AVAILABLE COPY

Chapter 2 - Managing Hazardous Materials



Hazardous Material Storage Inventory Form

April 2010

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1953 of 1990

Chapter 2 - Managing Hazardous Materials

		Shelflife Code ⁽⁸⁾													-		
		Unit of Issue	Ea	Ea.	RX	Ea	Ea	Ea	Ea	50	60	2			Jo T		TT
		8	2	4	·N	_	0	3	-	11	1	-0-			Page.		xtend
12	13	WSDSID ⁽⁸⁾		a													N=Can, BX=BK of Months to E
GE INVENTORY	Storage Location: Cabinat 43	Manufacturer (4)	Plenx/Edelman	Buerican lat 4 Dil Colo	Pitt Pana Cil	2.4 Pena Oil	661 Betwlink Pead.	Sale Ju-Actoria Suchans IAC	B# Ben 01	P	chine chines	Sately - Kleen Systans				RS MSDS Serial Number	 6) Criantlity present at time of inventiony (1) Unit of Issue-B1=Bottle, DM=Drum, CN=Can, BX=Box (3) Unit of Issue-B1=Bottle, DM=Drum, CN=Can, BX=Box (4) Shelf Life Extension code or Number of Months to Extend
HAZARDOUS MATERIAL STORAGE INVENTORY		NSN/Part Number ⁽³⁾	P11 25-662	01671-11-11-4 - 4 P. 2	9150-01-25-8-4799	arcom-698,2382	HUNG-SIS-10-UNB	Dier. 1 191 - 145 7-	inter carrier internet	12/1-01-10-17	TN 1052.401	9150-01-496-1957			Inventory Performed by:		(6) Cuer (7) Unit (6) Shell
HAZAH	Facility Name;		LINUDOL	257 2010 Sport		2016 1000001 1000 1000	NOTAL FILLIO	1000	Case charge Dil account of any	05 92 Erg. O.1 5EA 30	BIAND XLIMI Fluid	232 Erg. Dil 05/100-10			Date: / / Inventory	art availan Nimher	Percent comments Percent Stock Number Nanufacturer Name
2010	5	0	<u>0</u> 頁	-VE	T and the second	THE ISCING	da	1	Sound a char a character a	11 manual 1		11 -1 +38E+1-7H		1_1	ĉ		- 의미지

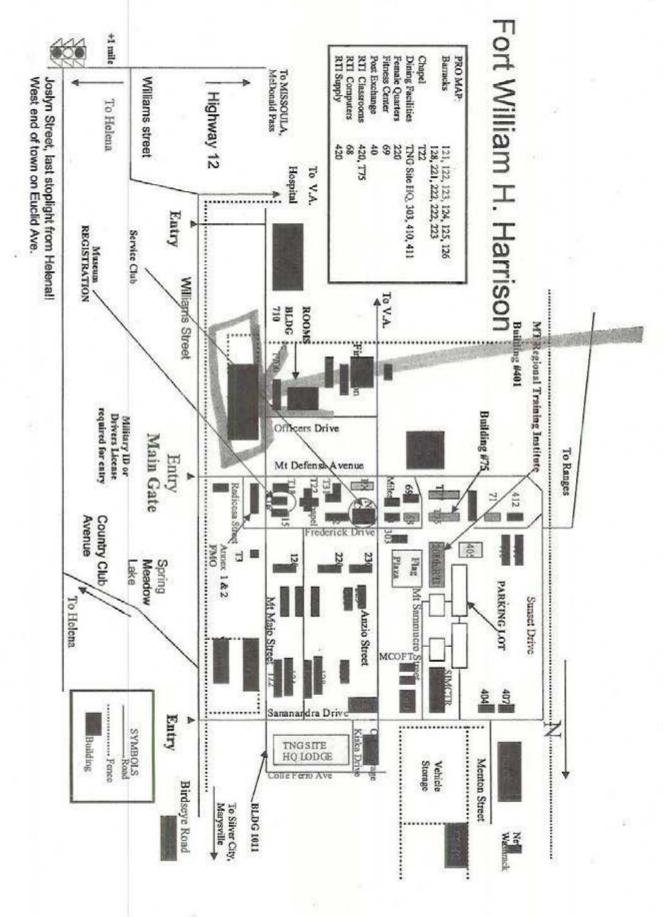
Hazardous Material Storage Inventory Form

Chapter 2 - Managing Hazardous Materials

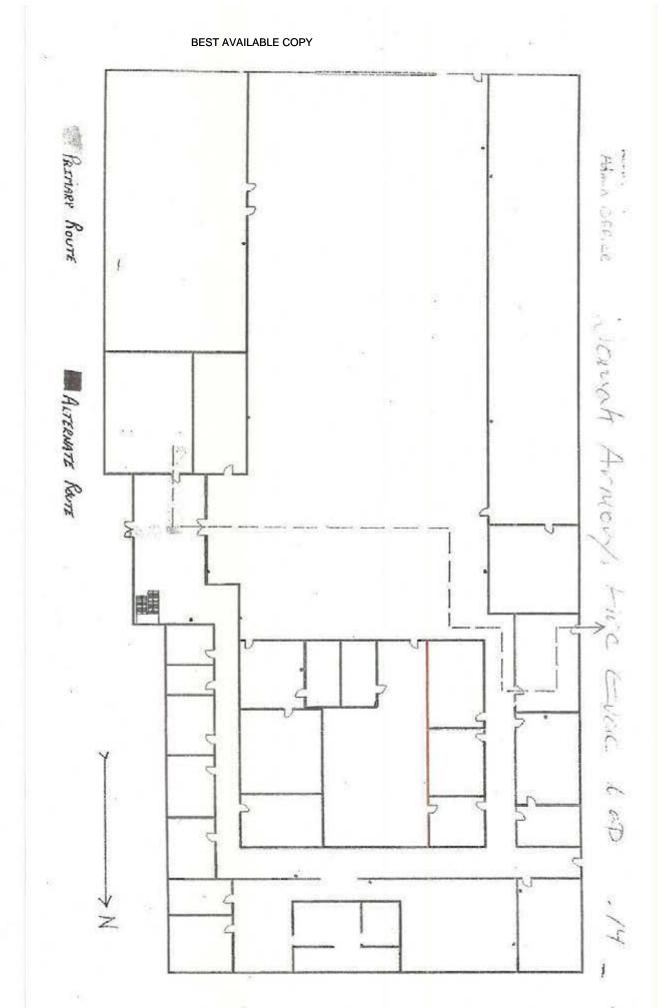
14

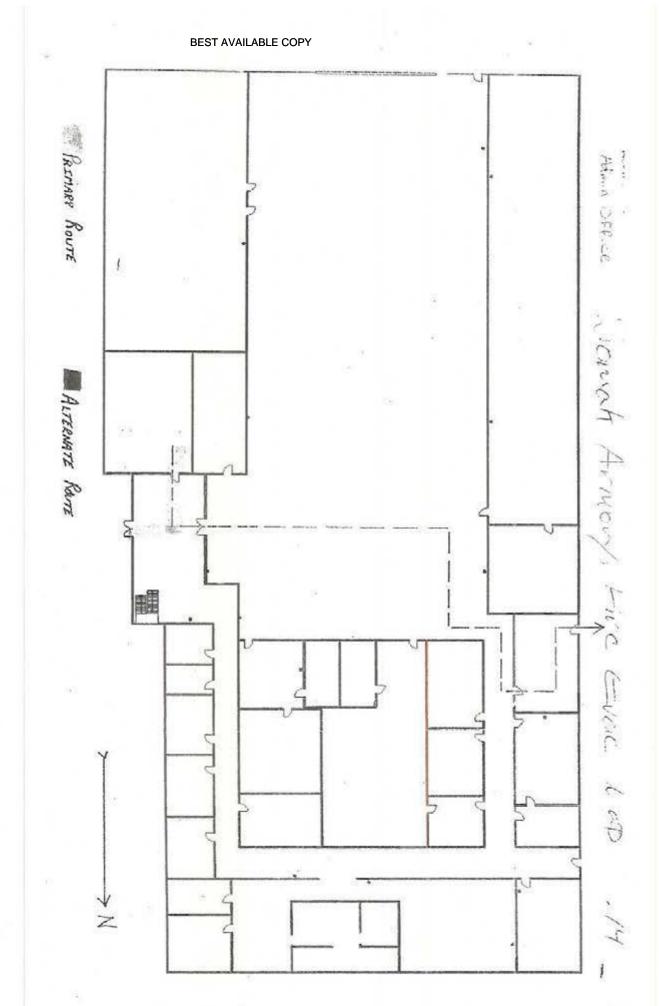
Posted May, 2018

Released by National Guard Bureau Page 1954 of 1990



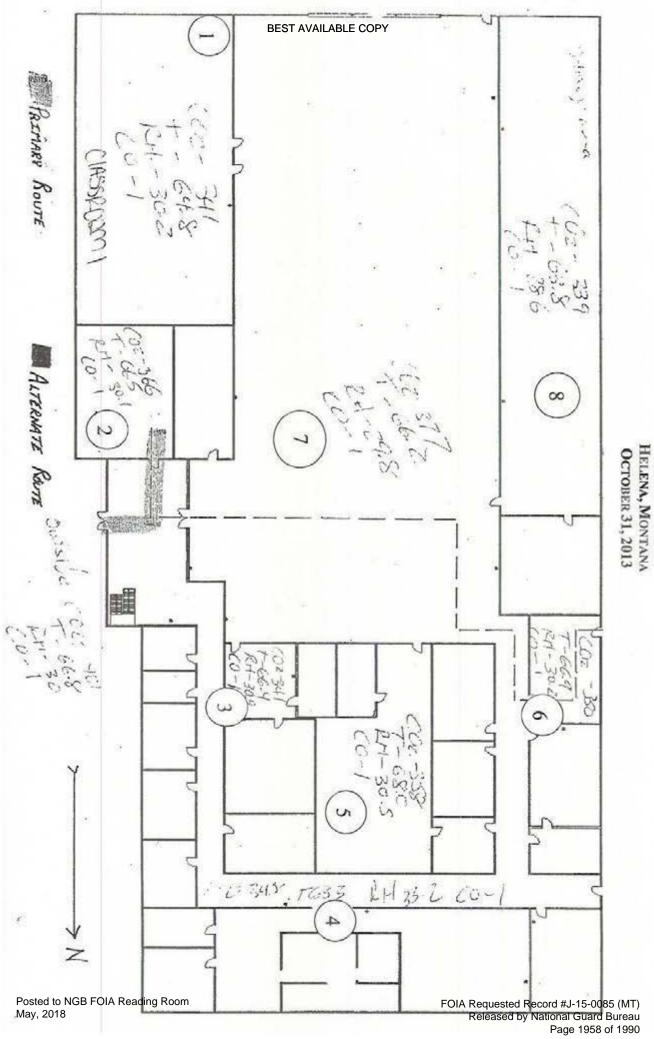
Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1955 of 1990





Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1957 of 1990



IAQ SURVEY SITE MAP KEY

WOMAK ARMORY

BEST AVAILABLE COPY IAQ MEASUREMENTS

WOMAK ARMORY HELENA, MONTANA OCTOBER 31, 2012

Location*	CO2 max permissible level 1,101 ppm	Temperature permissible range 68 - 75°F	RH% permissible range 30-60%	CO max permissible range 200 ppm. STEL
Location 1	341	64.8	30.2	1.0
Location 2	366	66.5	30.1	1.0
Location 3	341	66.4	30.9	1.0
Location 4	348	63.3	33.2	1.0
Location 5	358	68.0	30.5	1.0
Location 6	350	66.9	30.2	1.0
Location 7	377	66.2	29.8	1.0
Location 8	339	63.8	28.6	1.0
Outside	401	66.8	30.0	1.0

Please use Light Survey Site Map Key for identifying corresponding locations.

CO₂ = Carbon Dioxide PPM = Parts per million °F = Degrees Fahrenheit RH = Relative Humidity % = Percent CO = Carbon Monoxide STEL = Short Term Exposure Limit **Bold** = Temperature below recommended range *Italic* = RH below recommended range

ILLUBEST AVAILABLE COPYEY

WOMAK ARMORY Helena, Montana October 31, 2012

Location*	Location	Light – FC	Minimum lighting requirements - FC
Location 1	Center of Classroom	48	50
Location 2	Center of Room	65	50
Location 3	Center of Room	60	50
Location 4	Center of Room	35	30
Location 5	South End of East Hallway	44	10
Location 6	Center of Room	48	30
Location 7	Center of Room	59	50
Location 8	Center of North Hallway	70	10
Location 9	Center of Boiler Room	37	30
Location 10	Center of Room	74	50
Location 11	Center of West Hallway	88	10
Location 12	Center of Room	49	30
Location 13	Center of Room	48	30
Location 14	Drill Floor	14-17	30

Please use Lighting Survey Key for site map locations.

*FC= foot candle measurement

Bold = Below minimum lighting requirement

Oct. 31, 2012 013, 41374-74 RX mor 00 Readiness NCO **/e Jon-Responsive** az Inventory Nat tine all eun Ne S Rendiness NCO-Supply NCOrainic, 1 E/00r Hive Elac., Plan faciti throughout Posted - Reed. Evac. Nap - was of nor limits und cuployer portel la 12 V

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1961 of 1990

10-31-12 Wonak Armory, 163RD .74 1610 ipe. cac same 100r Womat 103112-1-01 - Dvill 100-02-Drill 1700--03 - Drill F100--04 - Deill 00--05-Dall 100 -06- Publications Labrary -07 = Urak room Tuble tops 05 - 145th Supply Area -09- Back hall floor, adj. to Mais Latrice hitchian was communed & reset as a prepares break voor, no food for the troops in 1 this revec curd Weapous may be suite basis in ort a 00and. liferary publications Water Dawaye-No signs on ground floar avea, second floor area not accessib

Posted to NGB FOIA Reading Room May, 2018

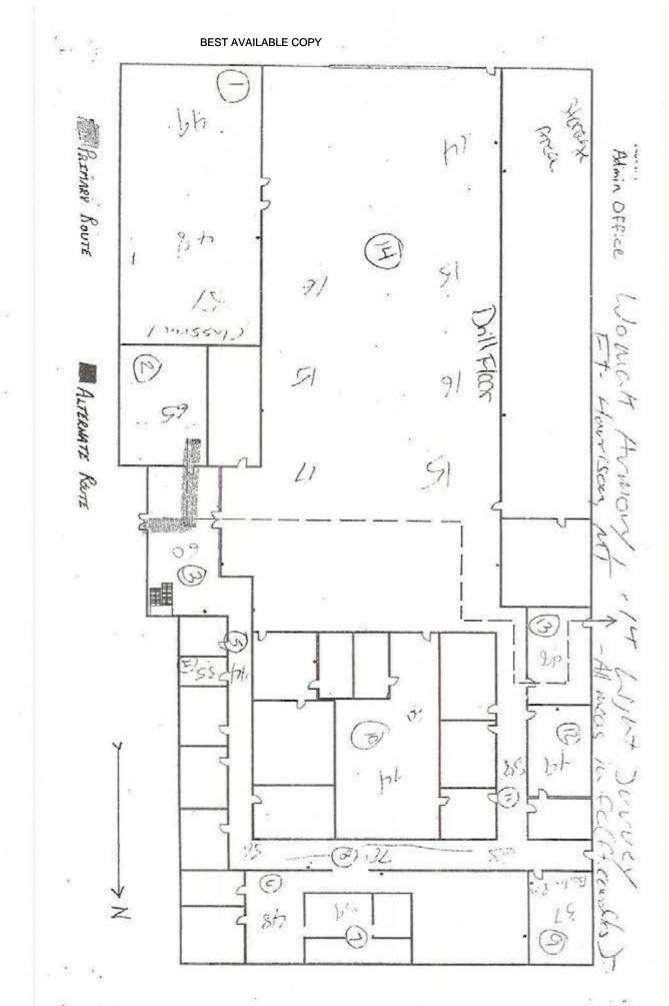
BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1962 of 1990

10-31-12 Domati Armory, 163 K) .74 Pointed Surfaces - exterior + interior, no observed pecting paint bestos Survey - Not las Ot M Plan - Not available tos Chris Derving of FMO has Asbe puild System works five Storage - in Flam lockers Hackb in the Austration hibrary na lockers are inventoring on doors, usD loc --S Levs Library SULVULG)ouc entilation Survey - Donc No Hoz Log Avail on-site

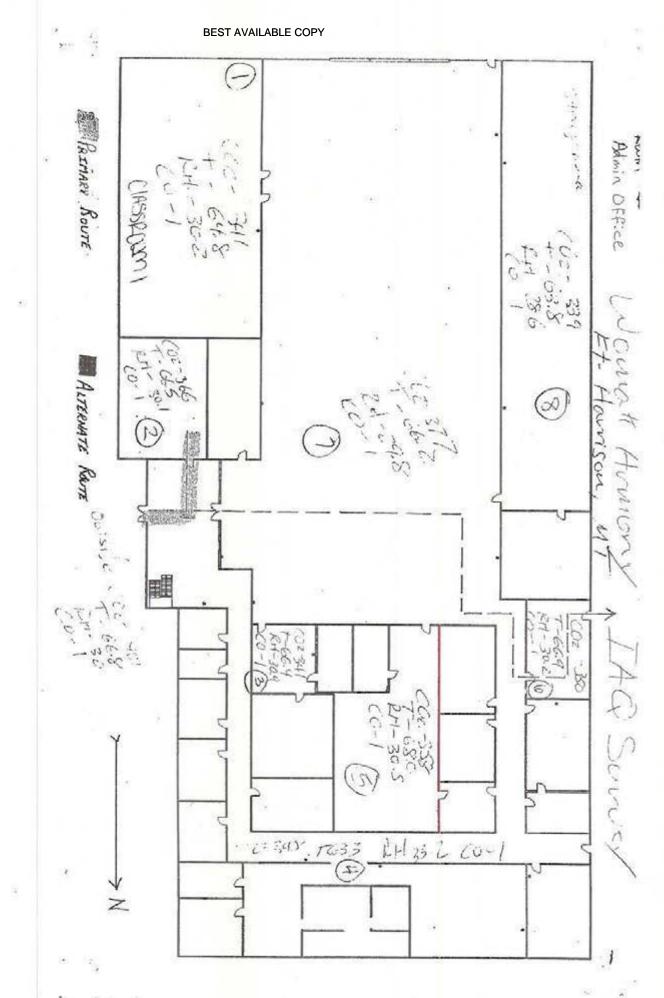
Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1963 of 1990



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1964 of 1990



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1965 of 1990

013. 41374.74 Oct. 31, 2012 RX mon iners NO sponsive e -R -**Kespons** e, inventor Ł NCOincss SONDOLY NCO 3 rainic, NG Evac. Floor Plan faciti troupart ostek Evac. Nap Kec do of not - was Houits usal cuployec ortel U. a

Posted to NGB FOIA Reading Room May, 2018

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1966 of 1990

Tektronix	Certificate of Calibration
Service Solutions	6209119
	Certificate Page 1 of 1
	Instrument Identification Non-Responsive
Company ID: 607229	PONumber
INDUSTRIAL HYGIENE SW Non-Responsive	
10510 SUPERFORTRESS AVE SUITE	
MATHER, CA 95655	
Instrument ID: H225438	Model Number: TL-1
Manufacturer: KONICA MINOLTA	Serial Number: 0279029
Description: ILLUMINANCE METE	
	Certificate Information
	Certificate Information
Reason For Service: CALIBRATION	Certificate Information Technician: Non-Responsive Cal Date 22May2012
	Technician: Non-Responsive
Reason For Service: CALIBRATION Type of Cal: NORMAL	Technician: Non-Responsive Cal Date 22May2012
Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE	Technician: Non-Responsive Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C
Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE Procedure: MINOLTA T-1M ILLUI	Technician: Non-Responsive Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS
Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE	Technician: Non-Responsive Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C
Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: IN TOLERANCE As Left Condition: IN TOLERANCE Procedure: MINOLTA T-1M ILLUI	Technician: Non-Responsive Cal Date 22May2012 Cal Due Date: 22May2013 Interval: 12 MONTHS Temperature: 24.0 C

accuracy which are traceable to National Metrology Institutes (NIST, NPL, PTB) which are traceable to the international System of Units (Si), derived from ratio type measurements, compared to reference materials or recognized consensus standards. The policies and procedures used comply with ANSI/NCSL Z540.1-1994. The quality system is registered to ISO9001.

This certificate shall not be reproduced, except in full, without the written consent of Tektronix Service Solutions.

Approved By: Service Representative

Calibration Standards

NIST Traceable#	Inst. ID#	Description	Manufacturer	Model	Cal Date	Date Due
1700230826	17-1001076	6 STEEL RULE	STARETT	C416R-72	10Jun2010	10Jun2012
1700276206	17-2007214	1000W LIGHT BULB	OPTRONIC LABS	OL FEL-P-K	17Feb2012	17Feb2017
1700201473	4053RC	MULTIMETER	FLUKE	8842A	25Jul2011	25Jul2012
1700201472	461952	CURRENT SHUNT	LEEDS & NORTHRUE	4360	09Aug2011	09/wg2012

6120 Hanging Moss Road - Orlando, FL 32807 • Phone: 800-438-8165 • Fax: 407-678-4854

BEST AVAILABLE COPY

Tektronix

Service Solutions

DATASHEET

Manufacturer: Minolta

Model: TL-1

Workorder #: 602492

Procedure: Manufacture

Description: Illuminance Meter

Date: 22-May-12

	Strate and the second	CILLEUT IN	ANCE		Sec. Sec.		·····································
Range	Nominal Value	As Found	Result	As Left	Result	Min	Max
30fC (resolution: .1 fC)	10.00	10.1	P	10.1	P	9.7	10.3
300 fC (resolution: 1 fC)	100.0	100.1	P	100	P	97	103
3000 fC (resolution: 10 fC)	1000.0	1000.0	P	999	P	970	1030

Note: Measurement Uncertainty = +/- 2.4% of Indication.

Page 1 of 1



TSI - Customer Service report

Thank you for the opportunity to service your instrument.

RMA Number: 800235189

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

Ship-to party 5180406

Sold-to party 5180406

IHSW NGB ARMY NATL GUARD 10510 SUPERFORTRESS AVE S MATHER CA USA

Service Information: Purchase Order Purchase Order Date

cc-Non-Respons 03/26/2012

Description Calibration of VelociCalc Plus 8386A

Equipment 57602 VELOCICALC Plus Air Velocity Meter Serial Number 54110581 Material 8386A

Service Description:

Return Reason: CALIBRATION OVERDUE

Findings:

Unit sent in for clean and calibration. The unit passed as found.

Action:

The unit was cleaned, calibrated, and a complete operational checkout

was performed.

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1969 of 1990

ENVI	RONMENT	CONDITION									
TEMP	ERATURE		68.4 (20.2)	°F (°C)	_	M	ODEL.			8	386A
RE.A	IVE HUMION	TY	36	%RH		6			- 10 March		40504
BARO	METRIC PRES	SURE	28.61 (968.8)	inHg (hPa)		SE	RIAL NUM	BER		54	110581
10.02	ASLEFT						ANCE				
2	AS FOUND	Cui	100.17	1000			OLERANCE		RESULT		
-			LIBRAT	TONY	_			N	RESULT		
	TANDARD	MEASURED	ALLOWABI	FRANCE	1 #	-	ANDARD	14	RASURED	a contract of the local data	t: ft/min (m/s
1	0 (0.00)	0 (0.00)	-3~3 (-0)	and a second second second	7		13 (3.26)		40(3.25)	the state of the second second second	(3.17~3.36)
2	34 (0.17)	35 (0,18)	31-37(0.		8		95 (5.06)		91 (5.03)	and the second second	(4.90-5.21)
	64 (0.32)	64 (0.32)	61-67 (0.)		9		68 (7.45)	14	76 (7.50)	COLUMN TWO IS NOT THE OWNER.	(7.23~7.68)
	99 (0.50)	99 (0.50)	96~102 (0.	and the second second second	10	-	\$1 (12.60)		63 (12,51)	Contraction of the American Street and	(12.22~12.98)
	160 (0.81) 328 (1.67)	159 (0.81) 325 (1.65)	155-164 (0 318-338 (1	and the second se	11		01 (22.87)	-	40 (22.55)		(22.18~23.55) (39.42~41.86)
						_			(10.33)	1100-02401	
	TANDARD	VERIFICATION MEASURED		ILE RANGE	1	-	EM T-119	TN	LEASURED	ALLOWA	Unh: "F ("C
	32.0 (0.0)	32.1 (0.1)		(-0.3-0.3)	2	-	0.0 (60.0)	-	39.8 (59.9)	a sprint in a second state	5 (59.7-60.3)
PRES	SURE VER	IFICATIÓN			5	SYST	EM V-106	-		Un	It: InH 20 (Pa
	TANDARD	MEASURED	1 4110	WABLE RAN	-	Ha	STANDAL	PD 1	MEASURED		ABLE RANGE
1	-4.073	4.084	the second se	1194.027		1	8.027 (199		8.074 (2010.4)	a la se la seconda de la	(1977.5-2020.0
-	(-1014.2)	(~1016.9)		25.6~~1002.8	a car	-	14.052		14,114		06~14,198
2 2.	032 (506.0)	2.041 (508.2)	2.007-2.	057 (499.7-5	12.3)	4	(3498.9		(3514.4)		.7-3535.2)
HUN	IDITY AS	the second s				-	EM H-102				Unit: %R
#	STANDARD	MEASURED		ABLE RANC	E	#	STANDARI	D	MEASURED		ABLE RANGE
2	30.0	30.6		7.0-33.0		4	70.0	-	69.1 89.4	and the second second second	.0~73.0
3	50.0	49.9		7.0-53.0		ť†	90.0	+	07.4	0/	,0-93,0
data) a Techno of phys D Pi V T	nd has been a logy (NIST)	E0044 E0013 E0033 E0018 E0035	tandards whose eel with respect in system is reg h ID Last C 77 12-15- 58 12-12- 27 09-19- 00 01-19-	a occuracies a to Instrument intered to ISO al. Cal. Di 11 12-15- 11 06-12- 07 09-19- 12 07-19- 12 08-28-	re irai -9001 12 12 12 12	Ceable Markes 2008 M Te Pr Ba	to the Unite	ed Stat Traceu he req Variab	tes National Inst table to NIST, or wirements of ISC ele System ID E001644 E001360	itute of Standa Is derived from D 10012;2003.	Cal. Due 07-20-12 06-12-12 04-08-12
		- TOTT IN	- popol						March 27,	2012	
1.0				-	-				DATE		

BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1970 of 1990

TSI P/N 230015

CERTIFICATE OF CALIBRATION AND TESTING TSI Incorporated, 500 Cardigan Road, Shoreview, MN 55126 USA Tel: 1-800-874-2811 1-651-490-2811 Fax: 1-651-490-3824 http://www.tsi.com

EN	IVIRONMENT C	ONDITION			_	M	ODEL			8386A	
TE	MPERATURE		69.1 (20.6)	°F (°C)				OUCOA			
RD	LATIVE HUMION	TY	37	%RH		C.	RIAL NUM		10	54110581	
Ba	ROMETRIC PRES	SURG	28.61 (968.8)	inHg (hPa)		05	RIAL NUM	BEN		04110001	
	As LEFT						RANCE FOLERANCE				
		- C A L	IBRATI				C. S. C. S. C.	N	RESULT	· s –-	
Te	EMPERATURE	VERIFICATION			S	YST	EM T-119			Unit: °F (°C	
#	STANDARD	MEASURED		LE RANGE	11	_	TANDARD	N	MEASURED	ALLOWABLE RANGE	
1	32.0 (0.0)	32.1 (0.1)	31.5-32.5	(-0.3-0.3)	2	14	40.0 (60.0)	1	39.8 (59.9)	139.5-140.5 (59.7-60.3)	
PF	RESSURE VERI	FICATION			s	YST	EM V-106	-		Unit: inH ₂ O (Pa	
1	STANDARD	MEASURED	ALLOW	VABLE RANG	ANGE		1 STANDARD		MEASURED	ALLOWABLE RANGE	
1	-4.073 (-1014.2)	-4.084 (-1016.9)		-4.1194.027 (-1025.61002.8)		3	3 8.027 (1998.7)		8.074 (2010.4)	7.942-8.112 (1977.5-2020.0	
2	2.032 (506.0)	2.041 (508.2)	2.007-2.0	57 (499.7~51	(2.3)	4	14.052 (3498.9))	14.114 (3514.4)	13.906~14.198 (3462.7~3535.2)	
H	UMIDITY VERI	FICATION		Constanting of the local division of the loc	S	YST	EM H-102			Unit: %RI	
#	STANDARD	MEASURED	ALLOW	ABLE RANGE		#	STANDARD MEASUR		MEASURED	ALLOWABLE RANGE	
1	10.0	11.8	7.	0-13.0		4	70,0		69.1	67.0~73.0	
2	30.0	30.6	27	.0-33.0		5	90.0		89.4	87.0-93.0	
3	50.0	49.9	47	.0-53.0							
V	ELOCITY VERI	FICATION			S	YST	EM V-110			Unit: fumin (m/s	
#	STANDARD	MEASURED	ALLOWABL.	E RANGE	11	S	TANDARD	N	LEASURED	ALLOWABLE RANGE	
1	0 (0.00)	0 (0.00)	-3-3 (-0.0	2-0.02)	7	6	48 (3,29)		646 (3.28)	629-667 (3.19-3.39)	
2	35 (0.18)	34 (0.17)	32-38 (0.1	6-0.19)	8	9	96 (5.06)		997 (5.06)	966-1025 (4.91-5.21)	
3	64 (0.33)	64 (0.32)	61-67 (0.3	1~0.34)	9	14	76 (7.50)	1	476 (7.50)	1432~1521 (7.27~7.72)	
4	99 (0.50)	99 (0.50)	96~102 (0.4	(9-0.52)	10	24	76 (12.58)	2	472 (12.56)	2401-2550 (12.20-12.95)	
5	160 (0.81)	159 (0.81)	155~165 (0.	79~0.84)	11	44	98 (22.85)	4	548 (23.10)	4363~4633 (22.17-23.54)	
6	346 (1.76)	346 (1.76)	335~356 (1.	70-1.81)	12	79	88 (40.58)	8	013 (40.71)	7743-8227 (39.36-41.80)	

TSI does hereby certify that the above described instrument conforms to the original manufacturer's specification (not applicable to As Found data) and has been calibrated using standards whose accuracies are traceable to the United States National Institute of Standards and Technology (NIST) or has been verified with respect to instrumentation whose incruracy is traceable to MIST, or is derived from accepted values of physical constants, TSI's calibration system is registered to ISO-9001:2008 and meets the requirements of ISO 10012:2003.

Measurement Variable	System ID	Last Cal.	Cal. Due
Temperature	E001800	01-19-12	07-19-12
DC Voltage	E004477	12-15-11	12-15-12
Pressure	6001558	12-12-11	06-12-12
Velocity	E003327	09-19-07	09-19-12
Humidity	E003539	02-28-12	08-28-12
Temperature	E004402	12-08-11	06-08-12
Pressure	E001721	12-13-11	06-13-12
Velocity	E003327	09-19-07	09-19-12

spon

Measurement Variable	System ID	Last Cal.	Cal. Due
Temperature	E001799	01-19-12	07-19-12
Temperature	E001644	01-20-12	07-20-12
Pressure	E001560	12-12-11	06-12-12
Barometric Pressure	E001992	04-08-11	04-08-12
DC Voltage	E001658	05-28-11	12-28-12
Pressare	E001719	12-13-11	06-13-12
Barometric Pressure	E001992	04-08-11	04-08-12

DATE.

March 27, 2012

ID. CERT_DEPAULT

BEST AVAILABLE COPY

3M Occupational Health and Environmental Safety Division

IHSW-NGB



Quest Technologies 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questtechnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax



Page 1 of 2

Certificate of Calibration

Serial Number:

Last Calibration Date Calibration Due

3/2/2013

4/27/2012

25923

3/2/2011

4/27/2011

N/A

Certificate No: 1095258 CDF020012

Submitted By:

10510 SUPERFORTRESS AVE.

MATHER, CA 95655

Serial Number:	CDF020012	Date Received:	3/28/2012
Customer ID:		Date Issued:	3/29/2012
Model:	2900 SLM	Valid Until:	3/29/2013
Test Conditions:		Model Condition	s :
Temperature:	18°C to 29°C	As Found:	IN TOLERANCE
Humidity:	20% to 80%	As Left:	IN TOLERANCE
Barometric Pressure:	890 mbar to 1050 mbar		

SubAssemblies:

Description:

MICROPHONE QE 7052 1/2 IN. ELECTRET TYPE 2 PREAMP

.ibration Procedure: 56V995

Reference Standard(s):

I.D. Number	Device
ET0000453	FLUKE 45 MULTIMETER
ET0000556	B&K ENSEMBLE
Massurement Und	artainty.

+/- 2.2% ACOUSTIC (0.19DB)+/- 1.4% VAC +/- 0.1% VDC Estimated at 95% Confidence Level (k=2)

Calibrated By:

Reviewed/Approved By:

3/29/2012 3/29/2012

This report certifies that all calibration equipment used in the test is traceable to NIST or other NMI, and applies only to the unit identified under equipment above. This report must not be reproduced except in its entirety without the written approval of Quest Technologies.

098-393 Rev. B

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1972 of 1990

3M Occupational Health and Environmental Safety Division



Quest Technologies 1060 Corporate Center Drive Oconomowoc, WI 53066-4828 www.questlachnologies.com 262 567 9157 800 245 0779 262 567 4047 Fax

Page 2 of 2

ţ.

Certificate of Calibration

Certificate No: 1095258 CDF020012

(A) indicates out of tolerance condition

Test Type	Nominal	Tolerance-	Tolerance+	As Found	As Left	Unit
Calibration	110.0	109.5	110.5	110.1	110.0	dB
A Weighting/125Hz	93.9	92.4	95.4	94.4	94.3	dB
A Weighting/250Hz	101.4	99.9	102.9	101.8	101.7	dB
A Weighting/500Hz	106.8	105.3	108.3	107.0	106.9	dB
A Weighting/1kHz	110.0	109.5	110.5	110.1	110.0	dB
A Weighting/2kHz	111.2	109.2	113.2	111.5	111.4	dB
C Weighting/125Hz	109.8	108.3	111.3	110.6	110.5	dB
C Weighting/250Hz	110.0	108.5	111.5	110.7	110.5	dB
C Weighting/500Hz	110.0	108.5	111.5	110.5	110.3	dB
C Weighting/1kHz	110.0	109.5	110.5	110.2	110.1	dB
C Weighting/2kHz	109.8	107.8	111.8	110.2	110.1	dB
Lin Weighting/125Hz	110.0	108.5	111.5	110.8	110.7	dB
Lin Weighting/250Hz	110.0	108.5	111.5	110.7	110.6	dB
Lin Weighting/500Hz	110.0	108.5	111.5	110.5	110.4	dB
Lin Weighting/1kHz	110.0	109.5	110.5	110.2	110.1	dB
Lin Weighting/2kHz	110.0	108.0	112.0	110.4	110.3	dB
Lin/60 - 120/120	120.0	118.8	121.2	120.6	120.5	dB
Lin/60 - 120/110	110.0	109.5	110.5	110.1	110.0	dB
Lin/60 - 120/100	100.0	98.8	101.2	99.9	99.8	dB
Lin/60 - 120/90	90.0	88.8	91.2	90.0	89.9	dB
Lin/40 - 100/90	90.0	88.8	91.2	89.8	89.8	dB
Lin/40 - 100/80	. 80.0	78.8	81.2	79.9	79.8	dB
Peak/60 - 120/120	123.0	121.5	124.5	122.2	122.0	dB
Peak/60 - 120/110	113.0	111.5	114.5	113.1	112.9	dB
Peak/60 - 120/100	103.0	101.5	104.5	103.0	102.8	dB
Peak/60 - 120/90	93.0	91.5	94.5	93.1	93.0	dB
DC Out/120dB	1.000	0.950	1.050	1.008	1.005	VDC
AC Out/120dB	3.160	2.920	3.430	3.252	3.196	VAC

* indicates non accredited

098-393 Rev. B

Posted to NGB FOIA Reading Room May, 2018

An ISO 9001 Registered Company ISO 17025 Accredited Calibration Laboratory



FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1973 of 1990

GRO PRECISION ALIBRATION INC. MICRO PRECISION CALIBRATION 22855 INDUISTRIAL PLACE GRASS VALLEY CA 95949 (530) 268-1880

Certificate of Calibration

Gal. Due Date:

Date: Nov 20, 2012

MPC Control #:

Asset ID:

Size:

Tomp/RH:

Gage Type:

Manufacturer:

Model Number:

Calibration Notes:

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA \$5630

CD3921

IAQ METER

68.9°F/35.6 %

1245

TS)

8551

NIA

 Work Order #:
 SAC-7004499

 Purchase Order #:
 013.IH1374.00

 Sedel Number:
 51380

 Pepartment
 N/A

 Performed By:
 Non-Responsive

 Received Condition:
 IN TOLEFORICE

 Returned Condition:
 IN TOLEFORICE

 Col. Date:
 November 19, 2012,

 Cal. Interval:
 12 MONTHS

12 MONTHS November 19, 2013

Cert No.

2008120221675

Standards Used to Calibrate Equipment

lip.	Description.	Model	Serial	Manufacturer	Cal. Que Daté	Trabeability #
CC8185	MULTIFUNCTION PROCEDO	720	1355148	PLUKE	Nov 5, 2013	2006320231043
J2270	LASER PARTICLE COUNTER	200L-1-115-1	90058781A	METONE	Apr 30, 2013	2008120175502
Procedu	ures Used in this Event			TENEN M.	Sec. State	1. 当时间

Procedure Name Decorption PARTICLE COUNTER PARTICLE COUNTERS 971 TEMP/HUMIDITY METER (FLUKE) 971

Galibrating Technician:

Non-Responsive

QC Approval:

Non-Responsive

nported expended uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the exvirings heator to 2, which for normal distribution someocords to a coverage billy of appendentiately 2016. The standard uncertainty of measurement has been determined in accordance with EA's Publication and rEST Technical Mate 1287, 1994 total A. Services medaped by with ISO 17925/2005, ISO 9801/2006, ANSUNCEL 2540-1, MPC Comby Merrist, MPC (200 and eth) cultivities only instructions. after opeles and measurement to determine the data state with the state of the state

endbracent system about the based on tropping of the environmental conditions was calculated explanate about the individual endback endback of the individual endback. Individually an threaded to 20 Paraget the National Individual Standards and Technology (NIST) endor recognized regional or International standards (about the Standards Individual Individual Standards Individual Standards Individual Standards and Technology (NIST) endor recognized regional or International standards (about the Standards Individual Individual Standards and Technology (NIST) endor recognized regional or International standards (about the Standards and Technology (NIST) endor recognized regional or International standards (about the Standards Individual Standards Individual Standards Individual Standards Individual Standards Individual Standards (Individual Standards Individual Standards Individual Standards Individual Standards Individual Standards Individual Standards (Individual Standards Individual Standards Individual Standards Individual Standards Individual Standards Individual Standards (Individual Standards Individual Standards (Individual Standards Individual Standards

nexcheduet's service instructor and we warranted for ne take then thely (20) days. This report here to be restructed in part of in a whole without the poor initian approval of the feature MPC lab. Page 1 of 1. (CERT, Rey 3)

Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1974 of 1990

LEAD WIPE SAMPLE RESULTS WOMAK ARMORY HELENA, MONTANA OCTOBER 31, 2012

Sample Number	Sample Area	Sample Location	Results (µg/ft ²)	ARNG/HUD Standard (µg/ft ²)
103112-Womak-01	Drill Floor	Floor - Northwest corner	11	≤40
103112-Womak-02	Drill Floor	Floor - Northeast corner	6.6	≤ 40
103112-Womak-03	Drill Floor	Floor - Center	7.7	≤ 40
103112-Womak-04	Drill Floor	Floor - Southwest corner	27	≤40
103112-Womak-05	Drill Floor	Floor - Southeast corner	23	≤40
103112-Womak-06	Publication Library	Table top	15	≤40
103112-Womak-07	Break Room	Table top	23	≤40
103112-Womak-08	Supply Room	Floor	17	≤40
103112-Womak-09	Back Hallway	Floor	5.9	≤40

μg/ft² = micrograms per square foot ARNG = Army National Guard HUD = US Department of Housing and Urban Development



ANALYTICAL REPORT

Report Date: November 13, 2012

Ion-Responsiv

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630

Phone:	(916)	353-2370 x 20
Fax:	(916)	353-2375
No	n-R	esnonsiv

Workorder: 34-1231253 Client Project ID: 013.IH1374.74/Womak Armory, MT Purchase Order: 13.IH1374.74 Project Manager: Non-Responsive

Analytical Results

Sample ID: 103112-Womak-01	Me	dia: Ghost Wipe)	Collected: 10/31/2012
Lab ID: 1231253001	Received: 11/07/2012			
Method: NIOSH 7300 Mod.	Samplin	Prepared: 11/09/2012 Analyzed: 11/12/2012		
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	11	11	2.5	

Sample ID: 103112-Womak-02	Collected: 10/31/2012			
Lab ID: 1231253002	Sampling Locat	ion: Womak Arr	nory, MT	Received: 11/07/2012
Method: NIOSH 7300 Mod.	. Samplin	Prepared: 11/09/2012 Analyzed: 11/12/2012		
Analyte	ug/sample	ug/ft°	RL (ug/sample)	
Lead	6.6	6.6	2.5	

Sample ID: 103112-Wornak-03	Media: Ghost Wipe Sampling Location: Womak Armory, MT				Collected: 10/31/2012
Lab ID: 1231253003				Received: 11/07/2	
Method: NIOSH 7300 Mod.	Sampling Parameter: Area 1 ft ²			-	Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)		
Lead	7.7	7.7	2.5		

Sample ID: 103112-Womak-04	Media: Ghost Wipe		Collected: 10/31/2012	
Lab ID: 1231253004	Sampling Location: Womak Armory, MT Sampling Parameter: Area 1 ft ²			Received: 11/07/201
Method: NIOSH 7300 Mod.				Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	
Lead	27	27	2.5	

ADDRESS 950 West LeVoy Drive, Salt Lake City, Utah, USA 84123 PHONE +1 801 266 7700 FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Laboratory Group A Campbell Brothers Limited Company

www.alsglobal.com

RIGHT SOLUTIONS PIORT PARTNER

Page 1 of 3 Posted to NGB FOIA Reading Room May, 2018

Environmental 3

BESTAVALABLECOPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1976 of 1990



ANALYTICAL REPORT

Report Date: November 13, 2012

von-Responsive

1141 Sibley Street Folsom, CA 95630

1	Phone: (916)	353-2370 x 20
	Fax: (916)	353-2375
	Non-F	Responsiv
ment		

Workorder: 34-1231253 Client Project ID: 013.IH1374.74/Womak Armory, MT Purchase Order: 13.IH1374.74 Project Manager: Non-Responsive

Analytical Results

Sample ID: 103112-Womak-01	Media: Ghost Wipe Sampling Location: Womak Armory, MT			Collected: 10/31/2012 Received: 11/07/2012 Prepared: 11/09/2012 Analyzed: 11/12/2012
Lab ID: 1231253001				
Method: NIOSH 7300 Mod.	Sampling			
Analyte	ug/sample	ug/ft²	RL (ug/sample)	ALL THE REAL PROPERTY OF
Lead	11	11	2.5	A THE SHEET A COMPANY

Sample ID: 103112-Womak-02	Media: Ghost Wipe Sampling Location: Womak Armory, MT Sampling Parameter: Area 1 ft ²			Collected: 10/31/2012
Lab ID: 1231253002				Received: 11/07/201
Method: NIOSH 7300 Mod.				Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft ^s	RL (ug/sample)	A STATISTICS OF A STATISTICS
Lead	6.6	6.6	2.5	

Sample ID: 103112-Womak-03	Me	Media: Ghost Wipe			Collected: 10/31/2012
Lab ID: 1231253003	Sampling Location: Womak Armory, MT			-	Received: 11/07/2012
Method: NIOSH 7300 Mod.	Samplin	Sampling Parameter: Area 1 ft ²			Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft ^r	RL (ug/sample)	1.163	
Lead	7.7	7.7	2.5		

Sample ID: 103112-Womak-04	-Womak-04 Media: Ghost Wipe			Collected: 10/31/2012
Lab ID: 1231253004	Sampling Locat	Sampling Location: Womak Armory, MT Sampling Parameter: Area 1 ft ²		
Method: NIOSH 7300 Mod.	Samplin			
Analyte	ug/sample	ug/ft ^z	RL (ug/sample)	The Manager Charles
Lead	27	27	2.5	

ADDRESS 960 West LeVoy Drive. Salt Lake City, Utah, USA 84123 PHONE +1 801 266 7700 FAX +1 801 268 9992 ALS GROUP USA, CORP. Part of the ALS Laboratory Group A Campbell Brothers Limited Company

www.alsglobal.com

RIGHT SOLUTIONS MONT PARTIES

Environmental

BESTAVAILABLE COPY

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1977 of 1990



ANALYTICAL REPORT

Workorder: 34-1231253 Client Project ID: 013.IH1374.74/Wornak Armory, MT Purchase Order: 13.IH1374.74 Project Manager Non-Responsive

Analytical Results

Sample ID: 103112-Womak-05 Media: Ghost Wipe			Collected: 10/31/2012		
Lab ID: 1231253005	Sampling Locat	Sampling Location: Womak Armory, MT			
Method: NIOSH 7300 Mod.	Samplin	Sampling Parameter: Area 1 ft ²			
Analyte	ug/sample	ug/ft*	RL (ug/sample)		
Lead	. 23 -	23	2.5		

Sample ID: 103112-Womak-06	Med	Collected: 10/31/2012		
Lab ID: 1231253006	Sampling Locat	Received: 11/07/2012 Prepared: 11/09/2012 Analyzed: 11/12/2012		
Method: NIOSH 7300 Mod.	Samplin			
Analyte	ug/sample	ug/ft²	RL (ug/sample)	The states of th
Lead	15	15	2.5	

Sample ID: 103112-Womak-07	Media: Ghost Wipe Sampling Location: Womak Armory, MT Sampling Parameter: Area 1 ft ²			Collected: 10/31/2012
Lab ID: 1231253007				Received: 11/07/2012
Method: NIOSH 7300 Mod.				Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft ²	RL (ug/sample)	
Lead	23	23	2.5	

Sample ID: 103112-Womak-08	Media: Ghost Wipe Sampling Location: Womak Armory, MT Sampling Parameter: Area 1 ft ²			Collected: 10/31/2012
Lab ID: 1231253008				Received: 11/07/2012
Method: NIOSH 7300 Mod.				Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	17	17	2.5	

Sample ID: 103112-Womak-09 Lab ID: 1231253009	Media: Ghost Wipe Sampling Location: Womak Armory, MT Sampling Parameter: Area 1 ft ²			Collected: 10/31/2012 Received: 11/07/2012
Method: NIOSH 7300 Mod.				Prepared: 11/09/2012 Analyzed: 11/12/2012
Analyte	ug/sample	ug/ft²	RL (ug/sample)	
Lead	5.9	5.9	2.5	

Report Authorization

-Responsive Non-Responsive

BEST AVAILABLE COPY EMPLOYEE LIST

WOMAK ARMORY HELENA, MONTANA OCTOBER 31, 2012

Job Title	Rank	Last Name, First Name	Social Security # (Last 4 Digits)
Readiness NCO	on-Responsive	Non-Responsive	Non-Responsi
Supply NCO			
Training NCO			

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1979 of 1990

				Industrial Hygiene, Southwest Violation Inventory Log Womak Armory - Helena MT					
CONTROL	HAZARD DESCRIPTION	SITE	RAC	HAZARD COUNTERMEASURE	SUSPENSE	ACTION OIC/NCOIC	Estimated Cost(s)	DATE	REFERENCES
MTWA-103112-4.4	MTWA-103112-4.4 No asbestos documentation liccated at the facility.	Armory	4	Maintain copies of the Asbestos Operations & Maintenance Plan at the Armony.	(2)				29 CFR 1910 10010
MTWA-103112-4.4	MTWA-103112-4.4 Floor tiles are suspect asbestos containing materials	Armory	4	Consult with a Montana state-certified asbestos inspector to determine if the floor tiles contain asbestos.			đ		29 CFR 1910.1001(J)(B)
MTWA-103112-4.5	Temperatures below ASHRAE recommendations.	Armory	4	Maintain temperatures within ASHRAE recommended values.			1.2014		ASHRAE Standard 55-1992
MTWA-103112-4.6	MTWA-103112-4.6 Lighting did not provide the required illumination.	Armory	4	Replace the burnt out bulbs, increase the number of fatures or number of bulbs per fature, change to a more effective lighting type, or paint the walls a more reflective color.					FOIA Req
MTWA-103112- 4,13,2	Overdue monthly inspections of fire extinguishers	Amory	ω	Inspect all fire extinguishers monthly and document inspection date, and inspectors signature on the inspection lag.					29 CFR 1910.157 (6)(2)
E COPY 4.13.3	No emergency eyewash stations.	Amory	24	Install suitable facilities for for quick drenching or flushing of the eyes and body within the work area.					29 CFR 1910.151 (c)
ST AVAILABL 4.13.5 4.13.5	No fire alarm system.	Armory	O1	Install an employee alarm system that will provide a warning for necessary emergency action, or for reaction time for a safe escape of employees from the workplace or the immediate work area.					3910.165(b)(1)

4

Released by National Guard Bureau Page 1980 of 1990

APPENDIX - N: CONCLUSIONS AND RECOMMENDATIONS

WOMAK ARMORY HELENA, MONTANA OCTOBER 31, 2012

N.1 Introduction – This section provides conclusions and recommendations for the findings and observations described in the previous sections of the IHSAV report for Womak Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.4.2 describes the following: the N represents Conclusions & Recommendations and the 4.2 corresponds back to Section 4 – Observations; Item 2 – Painted Surface Evaluation).

N4.4 Asbestos Documentation – Locate and maintain copies of the Asbestos Survey and Assessment and the Operations and Maintenance Program at the Armory. Consult with a Montana state-certified asbestos inspector to determine if the floor tiles contain asbestos.

N4.5 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality – Maintain temperatures throughout the facility between 68 and 75°F in accordance with ASHRAE recommendations.

N4.6 Illumination Level Monitoring – Replace the burnt out bulbs, increase the number of fixtures or the number of bulbs per fixture, change to a more effective lighting type, or paint the walls a more reflective color.

N4.13.2 Safety Walk-Through – Inspect all fire extinguishers monthly and document inspection date, and inspector's signature on the inspection tag.

N4.13.3 Safety Walk-Through – Where the eyes or body of any person may be exposed to injurious corrosive materials, suitable facilities for quick drenching or flushing of the eyes and body shall be provided within the work area for immediate emergency use.

N4.13.4 Safety Walk-Through - Conduct an Industrial Hygiene Site Assistance Visit (IHSAV) of the Womak Armory's second floor, once access becomes available.

N4.13.5 Safety Walk-Through – Install an employee alarm system that will provide a warning for necessary emergency action, or for reaction time for a safe escape of employees from the workplace or the immediate work 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. Waste water containers.
- 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. Detergent with surfactant, e.g., Spic-N-Span, Mr. Clean, etc.

Disposal of Waste Water and Cleaning Materials:

- 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.
- Mop heads should be disposed of after initial cleanup, unless otherwise advised by Environmental office personnel. Note: <u>thorough cleaning of</u> <u>mop heads may be sufficient enough to reuse on future Armory cleanups</u> <u>but check with local Environmental Office.</u>
- 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.
- 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.
- 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: <u>This recommendation is for initial clean up activities and PPE</u> <u>requirements may be reduced after it has been determined non-hazardous</u> levels have been achieved.
- 3. Wash BDU's or personal clothing separately from children's clothes.

NOTE: No eating, drinking or cosmetics allowed during cleanup procedures (these may be allowed after washing of hands/face and done outside of cleanup area)

NOTE: Avoid blowing, shaking or like actions which could potentially disperses lead dust. <u>Dry sweeping, dusting, wiping or blowing with compressed air shall not be permitted</u>

Initial Armory Cleanup:

- 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. <u>Completely clean each room before moving on</u>.
- Prepare water and detergent for the wipe down phase, according to manufactures recommendations.

- 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)
 - Rinse out mop heads frequently to prevent contamination of dirty water.
- Cover entire drill floor surface with above prescribed water and detergent.
- 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 -<u>Do Not Shake Mop head</u> - have mop head laundered after use. <u>Always keep used dust mop heads</u> <u>in sealed double plastic bags when stored at armory/facility</u>. Shaking of mop head could release unwanted contaminants into surrounding atmosphere.
- 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. <u>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.</u>

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.

.74

Wouch Army National Guard Armory Survey 163 RD (To Be Included In Report)

Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces)	Done
Are any weapons cleaned in the facility, if yes where are they cleaned?	Yes drill Floor & publication Library
Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only)	Done
Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW.	NO
Is there any peeling paint? Take bulk sample if able.	None
Are there any signs of water damage or mold?	None
Any suspected ACM? Where and what condition is it in. Bulk sample if able.	Ves, Floors, Bids dedicated in 1971, No Surveyour' ousite
Quality of housekeeping	Good
HVAC maintenance plan in place?	No Place avail ousily of FMC
Overall condition of HVAC system	Good
Obtained CO2, Temp, RH monitoring	Douc .
HAZMAT inventory on hand (make copies for the report), MSDS available for all materials.	ERecd. Inventory
HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards.	Lockers stored in publication Library

.74

Fire alarm in working conditionnot usually in place in older armories	None
Fire extinguishers in place and properly identified and mounted	Yes
Evidence of monthly fire extinguisher inspections	None
Annual fire extinguisher inspections tags current	Yes, Action Fire extigation
Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented)	No Eye Jash ansite
Egress routes accessible and properly markednoted on Fire Evacuation Plan	Posked throughout Armon/ + Noted on Fire Dac PEn
Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable)	Hazcom - Not avail, writtenprog. Hearing Medicals - Jure of 2012
Any Photo labs	None
Any hazardous noise sources	None
Light levels checked throughout building	Done
Breaker panels properly labeled with no exposed wiring	Yes
Check building occupancy	3 Full Time Military Personnel
 How many military personnel, how many civilian personnel What types of units occupy facility, i.e. Administrative, Maintenance, etc.? 	163RD Combined Anna Batellion E 145th Forward Support Co Rental to Clubs, occasionally
Any civilian activities in armory (cub scouts, classes, day care, parties etc)	Rental to Clubs, orcasionally
Obtain two lead air samples	On IHSW Request Only None

and the second	<u> </u>
Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96.	Hitchen converted to a breakroom
Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214	Nonc
Conduct a safety walkthrough of entire facility document any safety deficiencies found.	Done
Take photos of outside of building, all sample points and any pertinent hazards or concerns.	Done.
Name of Armory, POC, phone #, address and organizations in Armory	Non-Responsive
(Add Checklist to Report)	

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	Q3	Q4 Annual
Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls	953-01-04				0
Breathing Zone samples collected above Occupational Exposure Limit (OEL)	953-01-04		2		0
Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls	953-01-05				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA	953-01-05				0
Number of Noise Sound Level samples collected >= 140 dBP with no controls	953-01-06				0
Number of Noise Sound Level samples collected >= 140 dBP	953-01-06				0
Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are recommended for control	953-01-07				0
Number of Noise Sound Level samples collected >= 140 dBP not controlled	953-01-07				0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled, that are recommended for control	953-01-08				0
Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled	953-01-08				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control	953-01-09				0
Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled	953-01-09				0
Total number of DOEHRS-IH shops coded as Priority 1 which have at least one task performed in the past 12 months	953-02-10	IHT			n/a
Total number of DOEHRS-IH shops coded as Priority 1	953-02-10	IHT			n/a
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-11	IHT			n/a
Number of buildings requiring a basic industrial hygiene characterization within the last 12 months	953-02-11	IHT			n/a
Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months	953-02-12	HT			n/a
Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months	953-02-12	HT			n/a
Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit	953-02-13	IHT			n/a
Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit	953-02-13	Ħ			n/a

Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1989 of 1990

FY 11 Installation Status Report (ISR) Services Documentation	Intellicode	Q1	Q2	Q3	Q4 Annual
Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months.	953-02-14	IHT			n/a
Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months.	953-02-14	HT			n/a
Number of personnel who were reassessed by industrial hygiene within the last 12 months.	953-02-15	IHT			n/a
Number of personnel who required reassessment by industrial hygiene within the last 12 months.	953-02-15	IHT	2 S		n/a
Number of processes which have been measured for potential hazardous noise levels with a sound level meter within the last 12 months.	953-02-16	IHT			n/a
Number of processes which require measurement for potential hazardous noise levels using a sound level meter within the last 12 months.	953-02-16	IHT			n/a
Number of personnel for which noise dosimetry was collected during their complete work shift to quantify their daily noise exposures within the last 12 months.	953-02-17	H			n/a
Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months.	953-02-17	HT			n/a
Nuther of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were inspected and measured for airflow rates	953-02-18				0
Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates	953-02-18				0
Number of ventilation systems which require corrective action based on deficiencies identified during an IH survey	953-02-19				0
Number of ventilation systems which were evaluated by an IH	953-02-19				0
Number of design review packages evaluated and addressed by an IH with recommendations applicable to occupational health concerns	953-02-20	IHT			n/a
Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns	953-02-20	IHT			n/a

10110 mm

14

Armory, 163rd Helen:

Posted to NGB FOIA Read May, 2018

-OIA Requested Record #J-15-0085 (MT) Released by National Guard Bureau Page 1990 of 1990