

18 June 12

ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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Industrial Hygiene Site Assistance Visit

Anacortes Readiness Center 2219 M Avenue Anacortes, WA 98221

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



Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 1 of 980



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

ARNG-CSG-P

31 JUL 2012

MEMORANDUM FOR Non-Responsive the Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Anacortes Readiness Center at 2219 M Ave, Anacortes, WA on 20 JUN 2012.

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 Armory had the following high risk level findings:

- 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Anacortes Readiness Center on 20 JUN 2012.

| 4. The technical point of contact is information, contact the Occupation OHN Non-Responsiv | Ion-Responsive (775) 771-3956. For follow up al Safety & Health Office, Non-Responsive (253) 912-3832. |
|--|--|
| | |
| | Non-Responsive |
| | Chief, Industrial Hygiene |
| DSS, Non-Responsive 72 CFMC | esponsive arview Dr. Carson City, NV 89701 60 Fairview Dr. Carson City, NV 89701 0,000 Army Aviation Dr. Reno, NV 89506 |
| CF w/encl OHN, <mark>Non-Responsive 2460 Fein</mark> Facility Supervisor | ISIVE 0,000 Army Aviation Dr, Reno, NV 89506 |



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ARNG-IHSW-CSG

27 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Anacortes Readiness Center (RC), 2219 M Avenue, Anacortes, WA 98221

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Anacortes RC, 2219 M Ave, Anacortes, WA conducted on 19 Jun 2012.

<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 Anacortex Readiness Center, Anacortes, WA on 20 JUN 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. Many of the areas reviewed during this visit were posted as noise hazardous areas and personnel were using the appropriate hearing protective devices and PPE for the particular operation.

b. 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.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Anacortes RC, 2219 M Ave, Anacortes, WA conducted on 19 Jun 2012.

a. A written Hazard Communication program should be implemented, with annual training and current MSDS's and Chemical Inventory list maintained and updated. (para. 4.1.1, 4.1.2, 5.1.1 & 5.2.1) (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:

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.

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.

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.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Anacortes RC, 2219 M Ave, Anacortes, WA conducted on 19 Jun 2012.

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 Washington 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.

t (775) 771-3956 or via email at

For additional information please contact

NGB, IHSW, CIV Industrial Hygiene

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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

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.
- 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</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.

<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)
 - 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 Services SITE ASSISTANCE VISIT



Army National Guard Anacortes Readiness Center 2219 M Ave Anacortes, WA 98221

> Prepared for: Non-Responsive

Industrial Hygiene Southwest

By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-1

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ATTACHMENTS

Washington Army National Guard Anacortes Readiness Center Follow-up IH SAV July 19 - 20, 2012

| Attachment 1 | - | Violation Inventory Log |
|--------------|---|-------------------------------------|
| Attachment 2 | - | Facility Diagram |
| Attachment 3 | - | Photographs |
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| | | |

Washington Army National Guard Anacortes Readiness Center Follow-up IH SAV July 19 - 20, 2012

1.0 EXECUTIVE SUMMARY

On June 18th, 2012, Non-Responsive of Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Anacortes Readiness Center, located at 2219 M Ave, Anacortes, WA 98221.

The primary point of contact for information gathered during this survey was at of the National Guard (360) 391-1776. The survey was conducted at the direction of Non-Responsive of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walk-through survey of the facility including the drill floor, office areas, locker rooms, supply areas, classrooms, and out buildings. Existing programs, i.e., respiratory protection, hazardous materials program, etc. were also scheduled to be reviewed for compliance, however, access to the information was limited.

The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual re-inspection.

A lead dust wipe sampling plan was prepared for the facility to ensure residual lead dust is kept to a minimum. These areas include the drill floor/assembly hall, the main entrance foyer, the art room, the weapons vault, and the locker room.

The following inspection areas were evaluated with specific recommendations or corrective actions offered:

1.1 Recommendation 4.1.1

Require contractors and personnel to conform with Army HAZMAT/HAZCOM program regulations for using and maintaining hazardous materials on site.

1.2 Recommendation 4.1.2

Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.

1.3 Recommendation 5.1.1

A written Hazard Communication (HAZCOM) program should be implemented when hazardous chemicals are introduced into this facility and training documented annually, as required by regulation.

1.4 Recommendation 5.2.1

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

ARNG12-001-4

Follow-up IH SAV July 19 - 20, 2012

2.0 INTRODUCTION

On June 18th, 2012 Non-Responsive Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Anacortes Readiness Center, located at 2219 M Ave, Anacortes, WA 98221.

The Anacortes Readiness Center supports the 790th Chemical Co. DET 2. The UIC (unit identification code) is

This facility has 4 full time guard members (1 AGR), and houses approximately 15-20 members on drill weekends which are once a month.

The Boys' and Girls' Club are long-term co-tenants (approximately 10 years) who have leased part of the building for a number of years. There have been up to 100 children per day during the summer months with many after school activities during the school year. Their areas are clearly outlined on the facility diagram in attachment 2, and include the drill floor (except on drill weekends), the art room, computer room, and one administrators' office to the west of the lobby. They also share the kitchen (which is not a commercial kitchen and used minimally), male and female restrooms, and one classroom There are no other co-tenants in the building.

According to the POC, the Boys and Girls Club will be vacating the premises at the end of October as their lease is being terminated. It was said that the intent is to house additional military personnel. To date, the Boys and Girls Clubs have been the only civilian occupant.

This facility has general offices and administrative areas, to include command and administrative offices, conference rooms, two classrooms, an arms vault adjacent to the unit storage area, male & female latrines, a locker room, boiler room, a janitorial room, and a kitchen. There is one out building used mainly for storage (referred to as the long barn) and has personnel lockers and unit cages. The state maintenance occupies a section of the building as well and stores miscellaneous equipment and supplies. Reportedly there has never been an IFR at this facility.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

Section 2 – Introduction Section 2.3- Recurring Observations

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Follow-up IH SAV July 19 - 20, 2012

| | Survey Procedures |
|-------------|----------------------------------|
| Section 4 - | Survey Observations and Findings |
| Section 5 - | Written Programs and Approvals |
| Section 6 - | Limitations and Approvals |

2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility workers. There were no

major issues regarding recurring observations, however Non-Responsive noted some areas of concern including:

- The HVAC system is extremely dusty. When the system starts, there is visible dust in the air from the ventilation ducts. Especially noticed in the assembly/drill hall. (see floor plan for locations)
- Condensation drips from a vent in the ceiling.
- There is evidence of water leaks/moisture damage on the south wall of the drill floor area
- There is currently no alarm system for the weapons vault. Personnel have no key.
- HVAC system is controlled at Camp Murray automatically. The air conditioning system
 was on during the winter months with no way to shut it down or turn on the heat from
 the building.
- Readiness center doors are left unlocked from time to time. POC suspects the state maintenance.

2.3.1 Lead Dust Hazards

Previous inspection reports indicate one high lead dust level, however current sampling is within regulations.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, storage/locker room and facility entrance way. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.* The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

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Follow-up IH SAV July 19 - 20, 2012

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials / MSDS

A spot check of the chemical storage areas was completed during this survey. State maintenance workers store cleaning supplies in a janitorial closet inside the main building. This area was found to be very messy and unorganized. They also occupy locked areas in the long barn to store equipment and supplies. An MSDS binder was visible but could not be accessed.

There is also an unlocked flammable storage cabinet in the boiler room which was mostly used for miscellaneous items (extension cords, rags, junk), This area was also unorganized and messy. No chemical inventory lists for the facility were available.

4.1.1 Recommendation

Require contractors and personnel to conform with Army HAZMAT/HAZCOM program regulations for using and maintaining hazardous materials on site. Contractor should have and maintain MSDS's for all products and a hazardous materials inventory list for all products.

4.1.2 Recommendation

Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.

4.2 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

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Follow-up IH SAV July 19 - 20, 2012

The office of Industrial Hygiene Southwest, located in Mather, California has developed a St..ndard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.2.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

| Sample Number | Location | Results (µg/ft ²) |
|-----------------|---------------------------------|----------------------------------|
| ARNG12-001-1-1 | Drill Floor NE | BRL |
| ARNG12-001-1-2 | Drill Floor Center | BRL |
| ARNG12-001-1-3 | Drill Floor SW | BRL |
| ARNG12-001-1-4 | Drill Floor NW | BRL |
| ARNG12-001-1-5 | Drill Floor Center North | BRL |
| ARNG12-001-1-6 | Art Room East Door | BRL |
| ARNG12-001-1-7 | Entrance to Drill Floor (Lobby) | BRL |
| ARNG12-001-1-8 | Locker Room Table | BRL |
| ARNG12-001-1-9 | Inside Vault | BRL |
| ARNG12-001-1-10 | Outside Vault Door | 38.0 |

Table 4.2.A - Lead Dust-Wipe Results

All floor areas tested resulted in dust lead levels below the recommended level of 200 µg/ft².

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

There were no written programs maintained at the facility.

5.1.1 Recommendation

A written Hazard Communication (HAZCOM) program should be implemented when hazardous chemicals are introduced into this facility and training documented annually, as required by regulation. The purpose of the HAZCOM Program is to inform employees about hazardous substances in the workplace, potential harmful effects of these substances and appropriate control measures. The primary tools of this program should include: warning labels, MSDSs and employee training.

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6.2 Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| IH Technician: | on-Responsive | 9-5-12 Date |
|-----------------------|---|-------------------------|
| | Cole & Associates Training & Consulting, Inc. | Balo |
| uality Assurance: | Non-Responsive | <u>8/15/1</u> 2 Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manager: | Non-Responsive | Date |
| | NGB- Industrial Hygiene Southwest | |

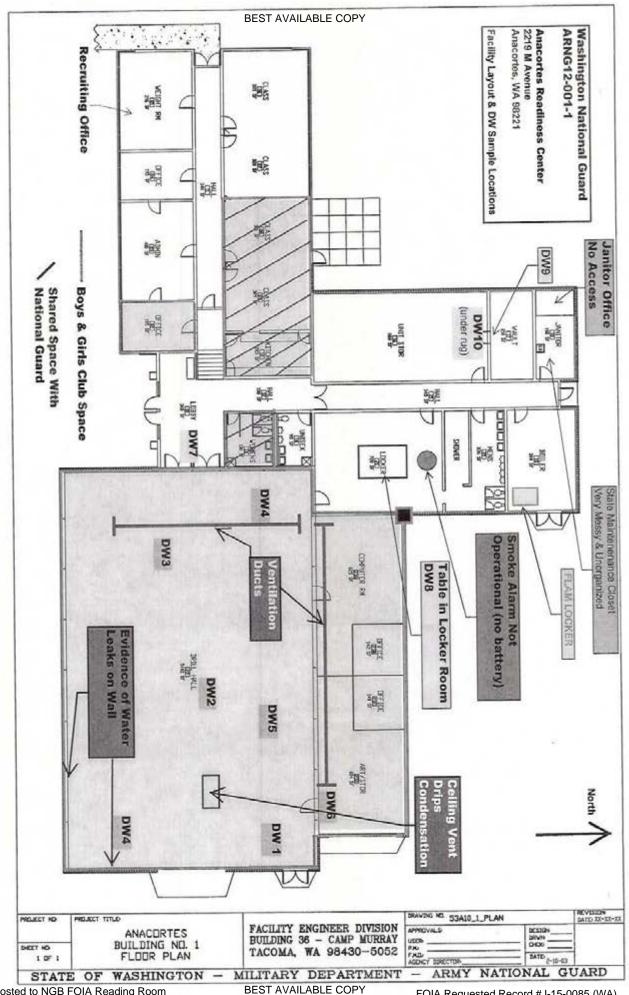
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|-------------------------------------|--------------------|--|---|--|---|---|
| REFERENCES | | 29CFR 19.1200. NGR 385-10, DODI 6050.5 | 29 CFR 1910.1200 NGR 385-10, Chapter 6 DODI 6050.5 | 29CFR 19.1200. NGR 385-10, DODI 6050.5 | 29CFR 19.1200, NGR 385-10, DODI 6050.5 | |
| DATE | CORRECTED | | | | | 4 |
| Estimated | Cost(s) | | | | | |
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| SUSPENSE | DATE | | 4 | | | |
| WAARNG - Anacortes Keadiness Center | (Abatement Plan) | Require contractors to conform with Army HAZMAT/HAZCOM program regulations for using and maintaining hazardous materials on site. | Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory | A written Hazard Communication (HAZCOM) program should be implemented facility-wide when hazardous chemicals are introduced. | Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. | |
| VAAR | RAC | 4 | 4 | 4 | 4 | |
| | SITE | Anacortes Readiness Center | Anacortes Readiness Center | Anacortes Readiness Center | Anacortes Readiness Center | |
| | HAZARD DESCRIPTION | State maintenance workers store cleaning supplies in a janitorial closet inside the main building and this area was found to be very messy and unorganized. | Hazardous materials inventory and MSDS was not up-to-date and current. | There were no known written programs maintained at the facility. | There were no training records maintained at the facility pertaining to occupational safety & health. | |
| CONTROL | NUMBER CLOSED | WAANA-062012- | WAANA-062012- 4.1.2 | WAANA-052012- 5.1.1 | WAANA-062012- 5.2.1 | |

Industrial Hygiene Southwest

Violation Inventory Log

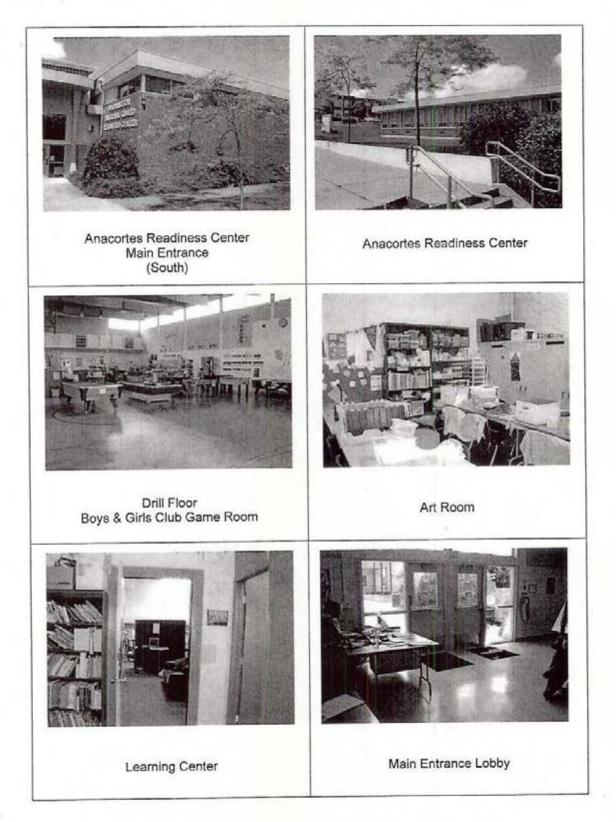
Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 21 of 980 Reference DA FORM 4754 VER: 15 OCT 2009



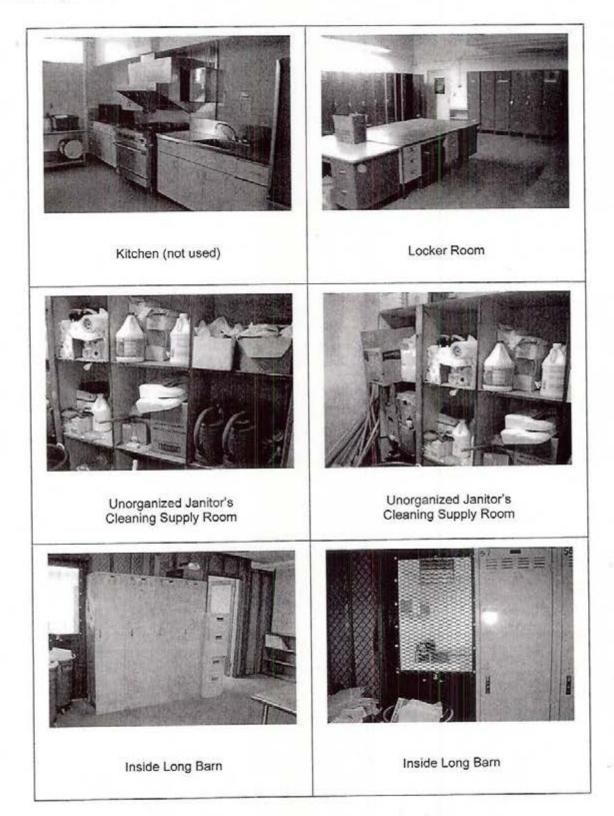
Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 22 of 980

Anacortes Readiness Center Follow-up IH SAV Site Photographs June 19-20, 2012



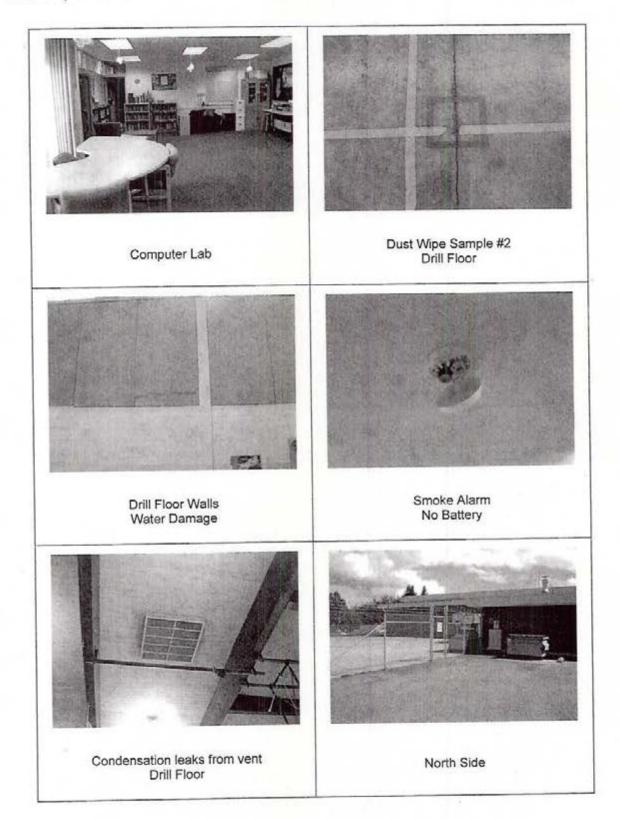
Attachment 3, Page 1

Anacortes Readiness Center Follow-up IH SAV Site Photographs June 19-20, 2012



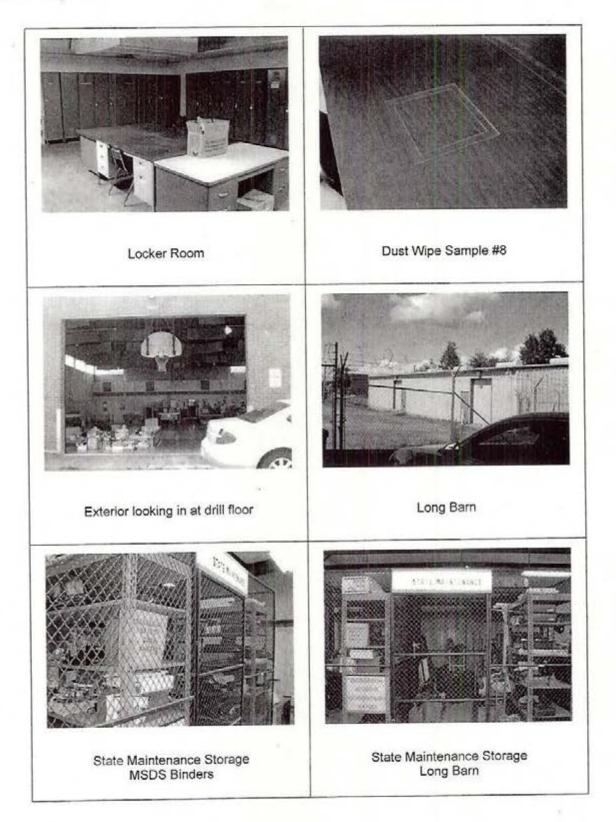
Attachment 3, Page 2

Anacortes Readiness Center Follow-up IH SAV Site Photographs June 19-20, 2012



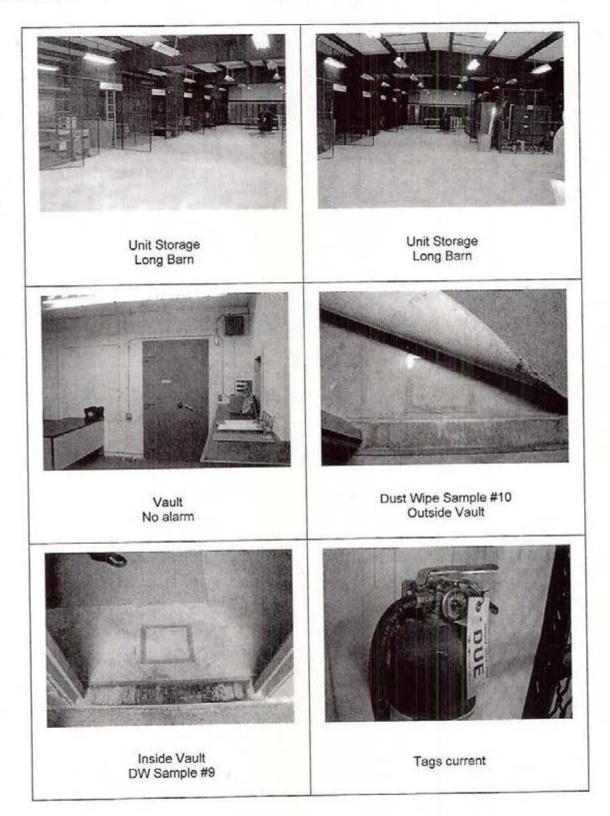
Attachment 3, Page 3

Anacortes Readiness Center Follow-up IH SAV Site Photographs June 19-20, 2012



Attachment 3, Page 4

Anacortes Readiness Center Follow-up IH SAV Site Photographs June 19-20, 2012



Attachment 3, Page 5

RESERVOIRS ENVIRONMENTAL, INC.

5801 Logan St., Suite 100 Denver CO 80216

TABLE ANALYSIS:

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 239288-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-1 |
| Client Project Description: | Anacortes Armory (WA) |
| Date Samples Received: | July 2, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | July 9, 2012 |

| Client ID Number | Lab ID Num | nber | Sample Area (sq.ft.) | LEAD (µg) | Reporting Limit (µg/ft ²) | LEAD CONCENTRATION (µg/ft ²) |
|---------------------|---------------|-------|----------------------------|--------------|---|--|
| ARNG-001-1-1 | EM 89 | 0131 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-2 | EM 89 | 00132 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-3 | EM 89 | 0133 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-4 | EM 89 | 0134 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-5 | EM 89 | 0135 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-6 | EM 89 | 0136 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-7 | EM 89 | 0137 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-8 | EM 89 | 0138 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-9 | EM 89 | 90139 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-1-10 | EM 89 | 90140 | 0.50 | 19.0 | 12.5 | 38.0 |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

P: 303-964-1986 F: 303-477-4275

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5801 Logan Street, Suite 100 Denver, CO 80216

Data QA____

1-866-RESI-ENV www.reliab.com

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Anacortes Facility Information

| 1. | Date Prepared: | 6/19/2012 | Unit Identification Code (UIC): | -Responsive |
|-----|---|---|--|-----------------------------|
| 2. | | ny name) of Personnel (iVe | Conducting IH SAV | & Associates |
| 3. | Facility Name and B Center ARC (ARNG | | ry Activities Conducted at Facility: Anacon | tes Readiness |
| 4. | Facility Address: | 2219 M Ave An | acortes, WA 98221 | |
| 5. | Primary Unit Assigne | ed to Facility <u>: 790</u> | th Chemical Co DET 2 | |
| 6. | Co-Tenant Units Ass Up to 100 children p | signed or Working Withi er day attend activities | in Facility (LIST ALL): <u>Boys & Girls Club (</u> during summer vacation | lease) |
| 7. | Square Feet Area of | Facility: <u>13,750 ft^2</u> | 2 DOC: 1963 | |
| 8. | Work Schedule: | M-F 8-4:30 | | |
| 9. | Number of Work Ba | ys: <u>NA</u> | | |
| 10. | Equipment Density a | and Type: | | |
| | | | ained at Facility: <u>NA</u> | |
| | b. List Iotal Num | ber for Each Nomencia | ature Services or Maintained at Facility: <u>N</u> | |
| 11. | Total Number of Pe | rsonnel: <u>17 Full Time</u> | Drill Weekend: 1 X (Month) Up to 400 | |
| 12. | No. of Admin Perso | nnel (Include AGR, Fed | d., Tech., IDT, State or Contract Employee | e):1 |
| 13. | No. of Maintenance | Personnel (Include AG | GR, Fed., Tech., IDT, State or Contract En | nployee): <u>0</u> |
| 14. | Total Number of Pe | rsonnel Enrolled in the | Hearing Conservation Program: N | Α |
| 15. | Total Number of Pe | rsonnel Enrolled in the | Respiratory Protection Program: NA | |
| 16. | Total Number of Pe | rsonnel Enrolled in the | Medical Surveillance Program:N | IA |
| 17. | Total Number of Pe | rsonnel Enrolled in the | Vision Program: NA | |
| 18. | | r: a. E-mail address, Co Non-Respoi | ommercial Telephone Number and Unit A (360)391 | ssigned to: -1776 (cell) |
| 19. | Safety Officer: a. E- Non-Responsive | the | rcial Telephone Number and Unit Assigne (360)391-1776 | d to: |
| 20. | Facility Telephone | Number:(3 | 360) 293-3524 Fax: | 14 |

Anacortes Army National Guard <u>Armorv</u> Survey Checklist

(To Be Included In Report)

| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | Yes |
|---|---|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | Yes drill floor |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | No Firing Range DOC 1974 |
| Is there any peeling paint? Take bulk sample if able. | Yes, there is peeling paint in the boiler room, although previous reports stated that it tested negative for lead |
| Are there any signs of water damage or mold? | Yes, Drill Floor |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | No |
| Quality of housekeeping | Above average in the areas leased by the boys and girls clubs. State maintenance workers keep cleaning and maintenance supplies on site and those areas are very unorganized and messy |
| HVAC maintenance plan in place? | No |
| Overall condition of HVAC system | Very dirty and dusty Complaints of visible dust in the air when turned on. |
| Obtained CO2, Temp, RH monitoring | N/A |

| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | Hazmat storage has very few chemicals and no MSDS or 'Right to Know' binders on site. Flammable locker in boiler room ventilated |
|---|--|
| Fire alarm in working conditionnot usually in place in older armories | Yes |
| Fire extinguishers in place and properly identified and mounted | Yes, For the most part |
| Evidence of monthly fire extinguisher inspections | For the most part |
| Annual fire extinguisher inspections tags current | For the most part |
| 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) | None on site |
| Any Photo labs | No |
| Any hazardous noise sources | No |
| Light levels checked throughout building | N/A |
| Breaker panels properly labeled with no exposed wiring | Yes |

| Check building occupancy | 1 790 th Chemical Co 6 full time 3 AGR |
|--|--|
| How many military personnel, how many civilian personnel | 2 Recruiting 3 boys & girls club |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | Boys & Girls Clubs (see floor plan) |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Yes, Water damaged walls on drill floor HVAC vent in ceiling leaks condensation AC turned on at Camp Murray, can't control at facility |
| Obtain two lead air samples | Upon Request Only |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Yes |
| Name of Armory, POC, phone #, address and organizations in Armory | -Non-Responsive 2219 M Ave Anacortes, WA 98221 790 th Chemical Co Det 2 Non-Responsive |
| (Add Checklist to Report) | (Add Checklist to Report) |

Attachment 6

Recommendations

COLE & ASSOCIATES TRAINING & CONSULTING, INC.

ENGINEERING, HEALTH, SAFETY, AND ENVIRONMENTAL

18 June 2012

US Army National Guard Bureau Industrial Hygiene Southwest 10510 Superfortress Ave, Suite C Mather, CA, 95655

Subject: ARNG12-001-1 Anacortes Readiness Center Recommendations

To Whom It May Concern:

Hazardous Materials / MSDS

- 1. Require contractors and personnel to conform with Army HAZMAT/HAZCOM program regulations for using and maintaining hazardous materials on site. (4.1.1)
- Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.(4.1.2)

Written Programs and Training

- A written Hazard Communication (HAZCOM) program should be implemented when hazardous chemicals are introduced into this facility and training documented annually, as required by regulation. (5.1.1)
- 2. Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. (5.2.1)

Non-Responsive

Cole & Associates Training & Consulting, Inc.

Cole & Associates Training & Consulting, Inc. • 18062 72nd Avenue South, Kent, WA 98032 (425) 793-5505 • (425) 793-5552 Fax • 1-877-455-BEAR • <u>www.ctcbear.com</u>



18 linen

ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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

Industrial Hygiene Site Assistance Visit

Bellingham Armory 3928 Williamson Way Bellingham, WA 98226

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

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 35 of 980



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

ARNG-CSG-P

31 JUL 2012

MEMORANDUM FOR Non-Responsive The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Bellingham Armory at 3928 Williamson Way, Bellingham, WA on 18 JUN 2012.

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 Armory had the following high risk level findings:

1. Housekeeping Practices. There was evidence of migration of lead dust found on wipe samples taken within IFRs and surrounding areas. The most likely cause for the lead dust was from IFR usage in past activities. Wipe samples taken within the inactive IFRs indicate the range was never properly converted IAW NG Pam 420-15 or cleaned IAW NGR 385-15 while there were active ranges.

2. Occupancy/Use of non-Converted IFR. The Bellingham armory uses a portion of their IFR for storage and the remainder as a workout area. Wipe samples indicate lead levels are above the recommended 40 micrograms per square foot (ug/ft2).

- 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.

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

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Bellingham Armory on 18 JUN 2012.

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. Housekeeping Practices (RAC 3).

1) Thoroughly clean areas surrounding the IFRs, at a minimum monthly, and utilize Clean-Up Standard Operating Procedure (SOP) provided in the IH Survey Report. Contact State Environmental Office for proper disposal of lead dust waste water.

2) Clean-up after every episode of weapons cleaning within the facility utilizing the SOP provided and dispose of waste IAW State Environmental Office guidance.

3) Post signs on armory entryway doors to warn personnel (pregnant or of child bearing age and children under 7 years of age) of the potential for exposure to harmful lead dust within this facility.

b. Non-Converted IFR Occupancy (RAC 2). IAW NG Pam 420-15 and NGR 385-15 Indoor Firing Ranges cannot be utilized for anything but weapons training or gualification.

1) Remove all added equipment (e.g., tables, chairs, desks, lockers, exercise equipment, floor mats and personal items) and thoroughly clean utilizing SOP accompanying the IH Survey Report. Items should not be returned to the IFR area until the range has been properly cleaned and converted.

a. Properly clean and/or convert/close IFR IAW NG Pam 420-15 using a certified lead mitigation company. Have clearance wipe sampling conducted by an independent professional (not hired by the mitigation company) such as your State IH Technician or your Regional Industrial Hygienist. This independent professional can determine when the IRF has been properly cleaned and is ready for occupancy.

4. The technical point of contact is Non-Responsive at (775) 771-3956. For follow up information, contact the Occupational Safety & Health Office Non-Responsive at (253) 912-3832.

2

ARNG-CSG-P SUBJECT: Executive Summary for the Industrial Hygiene Survey of Bellingham Armory on 18 JUN 2012.



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CF

Chief, Occupational Health Non-Responsive

DSS, (Non-Responsive Fairview Dr, Carson City, NV 89701 CFMO ASO, 20,000 Army Aviation Dr, Reno, NV 89506

CF wlencl

OHN Non-Responsive 460 Fairview Dr, Carson City, NV 89701 Facility Supervisor, (Non-Responsive 20,000 Army Aviation Dr, Reno, NV 89506



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ARNG-CSG-IHSW

23 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Bellingham Armory, 3928 Williamson Way, Bellingham, WA 98226

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Bellingham Armory, 3928 Williamson Way, Bellingham, WA conducted on 18 – 19 June 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 Bellingham Armory, Bellingham, WA on 18 JUN 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 written <u>Hazard Communication program</u> should be implemented, with annual training and current MSDS's and Chemical Inventory list maintained and updated. (para. 4.1.1, 4.1.2, 5.1.1 & 5.2.1) (RAC 4)

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Bellingham Armory, 3928 Williamson Way, Bellingham, WA conducted on 18 – 19 June 2012.

b. This <u>non-converted Indoor Firing Range</u> (IFR) should be shut down, all items inside shall be cleaned. Have the IFR cleaned using a qualified lead dust abatement company able to clean to standards recommended in NG PAM 420-15. The final clearance lead dust samples should be taken by <u>Washington</u> ARNG IH Technician, an independent contractor or IHSW regional personnel. (para. 4.3.1) (RAC 2)

c. <u>Housekeeping practices</u> need to be improved as evident by the migration of lead dust. The drill hall and IFR surrounding areas should be cleaned thoroughly using the Clean-up SOP and after every episode of weapons cleaning within the armory. (para. 4.2.1) (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.

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.

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Bellingham Armory, 3928 Williamson Way, Bellingham, WA conducted on 18 – 19 June 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 <u>Washington</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 Non-Responsive at (775) 771-3956 or via email at
Non-Responsive
Non-Responsive
Non-Responsive
NGB, IHSW, CIV
Industrial Hygiene

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 41 of 980 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

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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:

- 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.

- 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. 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)
 - 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 Services SITE ASSISTANCE VISIT



Army National Guard - Bellingham Armory 3928 Williamson Way Bellingham, WA 98226

Prepared for:

National Guard Bureau Industrial Hygiene Southwest

By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-3

Washington Army National Guard Bellingham Armory Follow-up IH SAV June 18-19, 2012

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1.0 EXECUTIVE SUMMARY

On June 18th, 2012 Industrial Hygienist Technicians of Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Bellingham Armory, 3928 Williamson Way, Bellingham, WA 98226. The inspection was completed the following day.

The primary point of contact for information gathered during this survey was **Non-Responsive** at (360) 676-2051. The survey conducted was at the direction of Source of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walk-through survey of the facility including the drill floor, office areas, locker rooms, HAZMAT containers and flammable lockers. Existing programs, i.e., respiratory protection, hazardous materials program, etc. were also reviewed for compliance.

The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual re-inspection.

A lead dust wipe sampling plan was prepared for the facility to ensure residual lead dust is kept to a minimum. These areas include the drill floor/assembly hall, weapons vaults, indoor firing range (IFR's closed or converted), including in and around the IFR and all areas where weapons are cleaned or handled.

The following inspection areas were evaluated with specific recommendations or corrective actions offered:

1.1 Recommendation 4.1.1

Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.

1.2 Recommendation 4.2.1

All items must be removed from the unconverted Indoor Firing Range and all items possibly contaminated by lead dust should be thoroughly cleaned. Items may not be returned to the area until/unless the IFR is properly converted.

1.3 Recommendation 4.3.1

Housekeeping Practices need to be improved as evident by the migration of lead dust. The indoor firing range/gym should be thoroughly cleaned, utilizing the SOP for Armory Clean-up.

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1.4 Recommendation 4.3.2

The building should have signage posted at the entryway warning females who are pregnant and young children (under the aged of six) to the potential danger of exposure from lead dust at least until the IFR is converted and passes a clearance inspection.

1.5 Recommendation 5.1.1

A written Hazard Communication (HAZCOM) program should be implemented when hazardous chemicals are introduced into this facility and training documented annually, as required by regulation.

1.6 Recommendation 5.2.1

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

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Washington Army National Guard Bellingham Armory Follow-up IH SAV June 18-19, 2012

2.0 INTRODUCTION

On June 18th, 2012, Non-Responsive f Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Bellingham Armory, 3928 Williamson Way, Bellingham, WA 98226.

The Bellingham Armory is under the command on Non-Responsive and supports the C Co 81st Brigade Special Troops Battalion (BSTB). The UIC (unit identification code) is

This facility has 5 full time guard members (2 AGR), and houses up to 80 members on drill weekends which are once a month. The armory was constructed 1960 and is approximately 31,000 square feet.

The Civil Air Patrol are long term co-tenants who lease the northwest section of the facility. There are no other co-tenants. These areas were locked and inaccessible at the time of the inspection.

The armory has general offices and administrative areas, to include command and administrative offices, conference rooms, several classrooms, one arms vault adjacent to the supply office and supply storage room, male & female latrines, a locker room, a boiler room, janitorial room, and a kitchen. There are two out buildings on the property. One is referred to as the 'long barn' and is used for unit storage and equipment. The other is currently used for unit storage and personnel lockers.

Reportedly, guardsmen clean their weapons off site as they usually meet at the Bellingham facility and head out to various training sites within the state of Washington. When training is held onsite in Bellingham, weapons are cleaned on the drill floor.

The facility is currently available for rental for civilian activities of all ages. Activities include Roller Betty's, dances, parties, meetings, and various sports functions. Findings in this report were obtained by observations at the facility and through interviews with personnel.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

- Section 2 Introduction
- Section 2.3- Recurring Observations
- Section 3 Survey Procedures
- Section 4 Survey Observations and Findings
- Section 5 Written Programs and Approvals
- Section 6 Limitations and Approvals

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2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility workers.

2.3.1 Lead Dust Hazards

Previous inspection reports indicate high lead dust levels.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, storage/locker room and facility entrance way. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.* The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials \ MSDS

A spot check of the chemical storage areas with the exception of janitorial closets (inaccessible) was completed during this survey. There was no known central HAZMAT/HAZCOM program for the facility and an accurate Hazardous Materials Inventory list for the facility could not be located. A new HAZMAT container is located outside on the SW corner of the facility adjacent to the long barn. Inside the container is a flammable storage locker. The locker was found to be fairly organized however products did not match the shelf identification labels.

A 'Right to Know Center' is located on the south wall of the drill floor. Master MSDS binders are current and well maintained and listed by product name and NSN number. All of the personnel that were present at the time of the inspection knew where the MSDS binders were located.

4.1.1 Recommendation

Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.

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4.2 Indoor Firing Range

The facility has an Indoor Firing Range (IFR) that has not been cleaned or converted. The space is being used as a gym/workout room with multiple weight lifting machines, floor mats, and exercise equipment. Reportedly the room is used on a daily basis.

4.2.1 Recommendation

All items must be removed from the unconverted Indoor Firing Range (IFR) and all items possibly contaminated by lead dust should be thoroughly cleaned. Items may not be returned to the area until/unless the IFR is properly converted and passes a clearance inspection.

4.3 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.3.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

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Washington Army National Guard Bellingham Armory

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| Sample Number | Location | Results (µg/ft ²) |
|-----------------|---------------------------|----------------------------------|
| ARNG12-001-3-1 | Inside Arms Vault | 37.5 |
| ARNG12-001-3-2 | Outside Arms Vault | 14.5 |
| ARNG12-001-3-3 | Supply Room Inside Door | 25 |
| ARNG12-001-3-4 | Supply Room Center | BRL |
| ARNG12-001-3-5 | Drill Floor SE Door | 70.5 |
| ARNG12-001-3-6 | Drill Floor SW Corner | BRL |
| ARNG12-001-3-7 | Drill Floor Center | BRL |
| ARNG12-001-3-8 | Drill Floor NE Corner | BRL |
| ARNG12-001-3-9 | Drill Floor NW Door | 48.5 |
| RNG12-001-3-10 | IFR North End on Backstop | 3405 |
| RNG12-001-3-11 | IFR SE Corner | 108 |
| ARNG12-001-3-12 | IFR SE End | 23.5 |
| ARNG12-001-3-13 | IFR Middle West End | 20 |
| ARNG12-001-3-14 | Field Blank | BRL |

Table 4.3.A - Lead Dust-Wipe Results

All floor areas tested resulted in dust lead levels at or below the recommended level of 200 μ g/ft² with the exception of sample #10 which was taken on the existing backstop. This level is extremely high at 3405 μ g/ft².

4.3.1 Recommendation

Housekeeping Practices need to be improved as evident by the migration of lead dust. Inside and outside the vault areas and the indoor firing range (IFR) should be thoroughly cleaned, utilizing the SOP for Armory Clean-up, to help prevent migration of lead dust after every episode of weapons cleaning.

4.3.2 Recommendation

The building should have signage posted at the entryway warning females who are pregnant and young children (under the age of seven) to the potential danger from exposure to lead dust at least until the IFR is converted and passes a clearance inspection.

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Follow-up IH SAV June 18-19, 2012

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

There were no written programs maintained at the facility.

5.1.1 Recommendation

A written Hazard Communication (HAZCOM) program should be implemented when hazardous chemicals are introduced into this facility and training documented annually, as required by regulation. The purpose of the HAZCOM Program is to inform employees about hazardous substances in the workplace, potential harmful effects of these substances and appropriate control measures. The primary tools of this program should include: warning labels, MSDSs and employee training.

5.2 Training

There were no training records maintained at the facility pertaining to occupational safety & health.

5.2.1 Recommendation

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

6.0 LIMITATIONS AND APPROVALS

6.1 Technical Assistance

Contact design of the Southwest Regional Industrial Hygiene Office, (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

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.

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Washington Army National Guard Bellingham Armory

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6.2 Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| | Non-Responsive | |
|--------------------|---|------------------------|
| IH Technician: | | <u>8-15-12</u> Date |
| Quality Assurance: | Cole & Associates Training & Consulting, Inc. Non-Responsive | 8/15/12 Date |
| | Cole & Associates Training & Consulting, Inc. | |

IHSW Program ManageriNon-Responsiv

NGB- Industrial Hygiene Southwest

Cole & Associates

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Date

Industrial Hygiene Southwest Violation Inventory Log

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

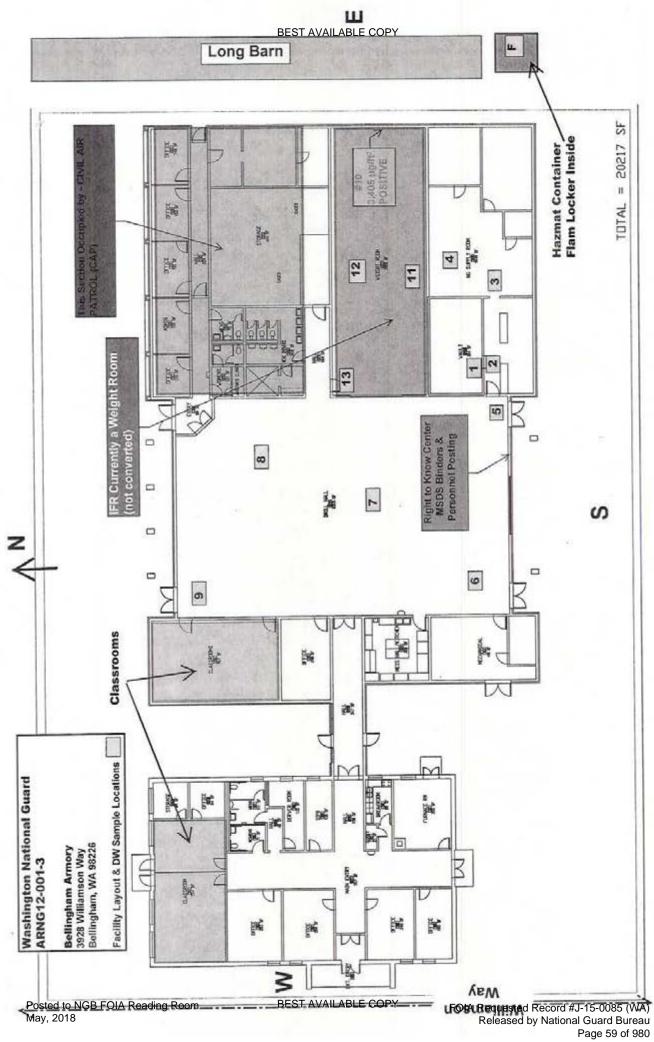
ARNG Bellingham Armory

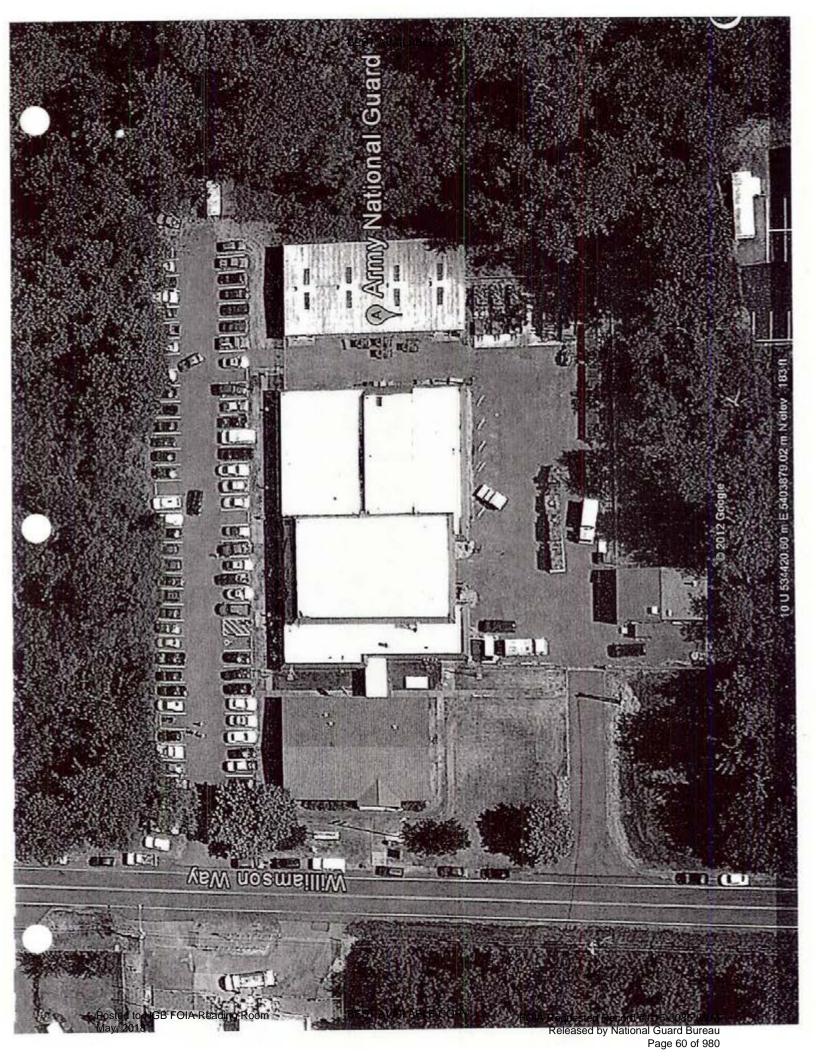
| CONTROL | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|------------------------|---|----------------------|-----|--|------------------|--------|----------------------|-------------------|--|
| WABEL-061812- 4.1.1 | Hazardous material/chemical inventory list could not be located. | Bellingham Armory | 4 | Update hazardous material/chemical inventory. | - | | | | 29 CFR 1910.1200 NGR 385-10, Chapter 6 DODI 6050.5 |
| WABEL-061812- 4.1.2 | There was no known central HAZMAT/IHAZCOM program for the facility. | Bellingham Armory | 4 | Maintain a facility-wide HAZMAT/HAZCOM program and keep MSDS and inventory logs current for each filammables locker and chemicals storage area. | | | | | 29CFR 19.1200, NGR 385-10, DODI 6050.5 NEPA NO 30 |
| WABEL-061812- 4.2.1 | The IFR has not been cleaned or converted and is being used as a gym/work out area on a daily basis. | Bellingham Armory | 8 | All items inside the indoor firing range shall be cleaned thoroughly as they are removed and IFR converted properly. | | | | | NGR 385-15, Section 2-3(a) & NGP 420-15 |
| WABEL-061812- 4.3.1 | The lead dust levels exceeded the recommended level of 200 µg/ft2. | Bellingham Armory | 5 | Housekeeping Practices need to be improved as evident by the migration of lead dust. The floor area inside the IFR should be thoroughly cleaned, utilizing the SOP for Armory Clean-up. | | | | | 29 CFR 1910.1025 NG PAM 420-15 |
| WABEL-061812- 5.1.1 | There were no known written programs maintained at the facility for HAZCOM. | Bellingham Armory | 4 | A written Hazard Communication (HAZCOM) program should be implemented facility-wide when hazardous chemicals are introduced. | | | | | 29CFR 19.1200, NGR 385-10, DODI 6050.5 |
| WABEL-061812- 5.2.1 | There were no training records maintained at the facility pertaining to occupational safety & health. | Bellingham Armory | 4 | Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. | | | | | 29CFR 19,1200, NGR 385-10, DODI 6050.5 |

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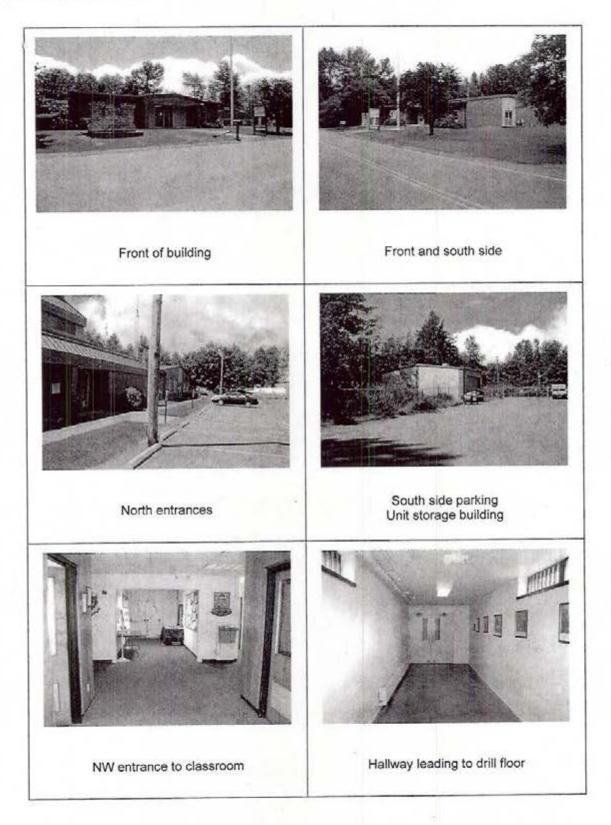
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Bellingham Armory Follow-up IH Site Assistance Visit

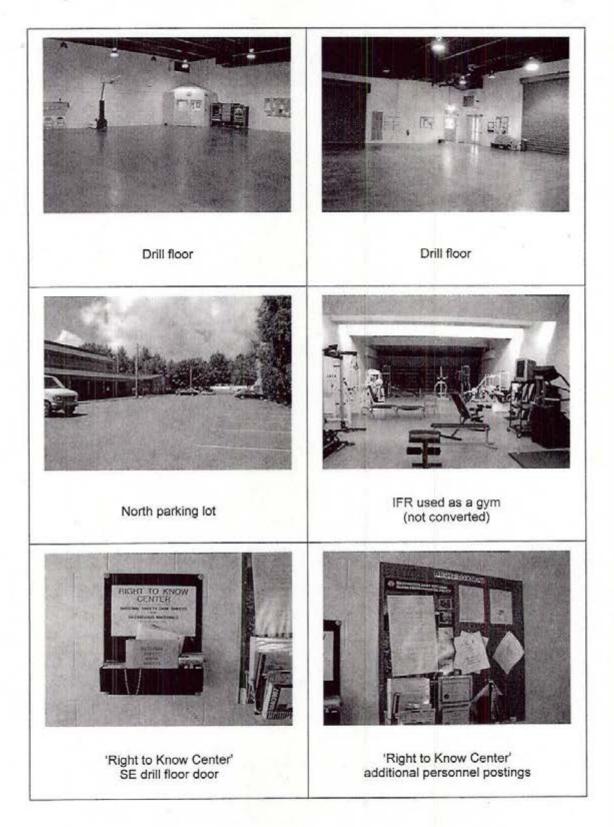
Site Photographs June 18-19, 2012



Attachment 3, Page 1

Bellingham Armory Follow-up IH Site Assistance Visit

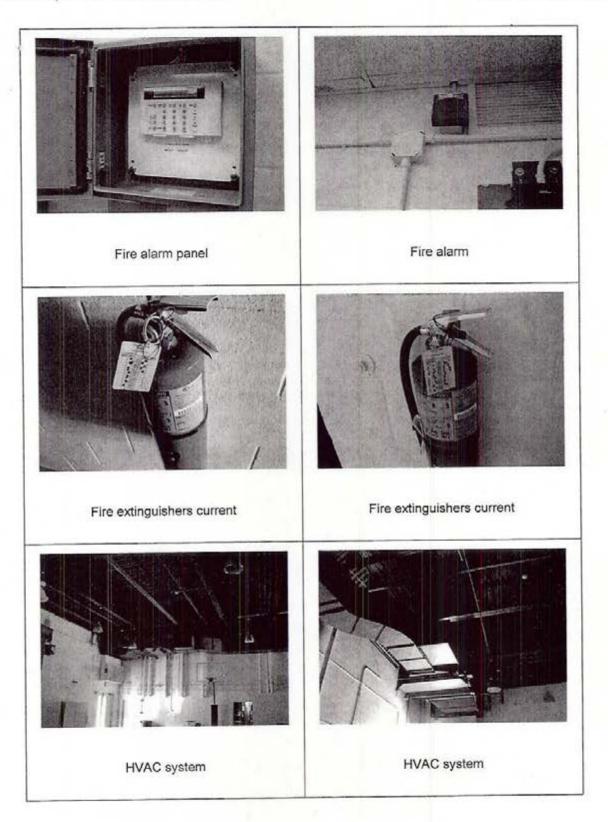
Site Photographs June 18-19, 2012



Attachment 3, Page 2

Bellingham Armory Follow-up IH Site Assistance Visit

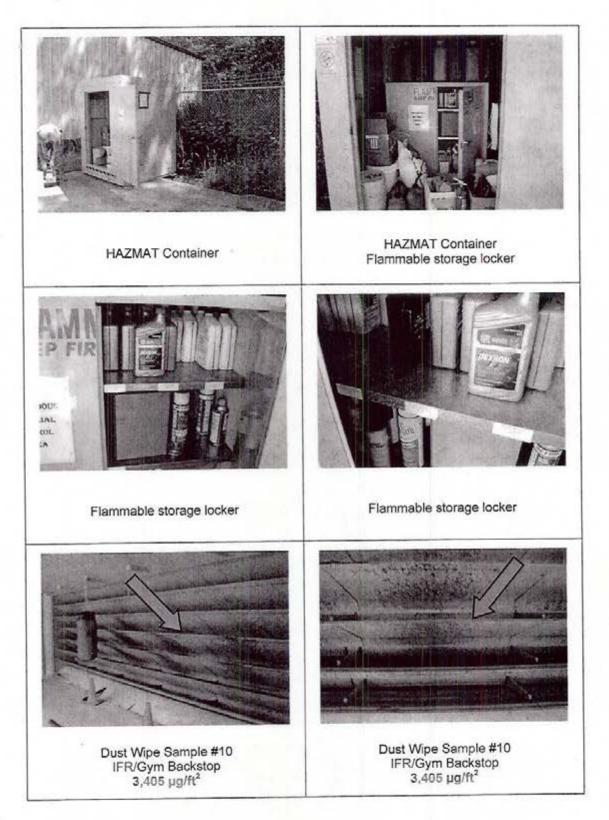
Site Photographs June 18-19, 2012



Attachment 3, Page 3

Bellingham Armory Follow-up IH Site Assistance Visit

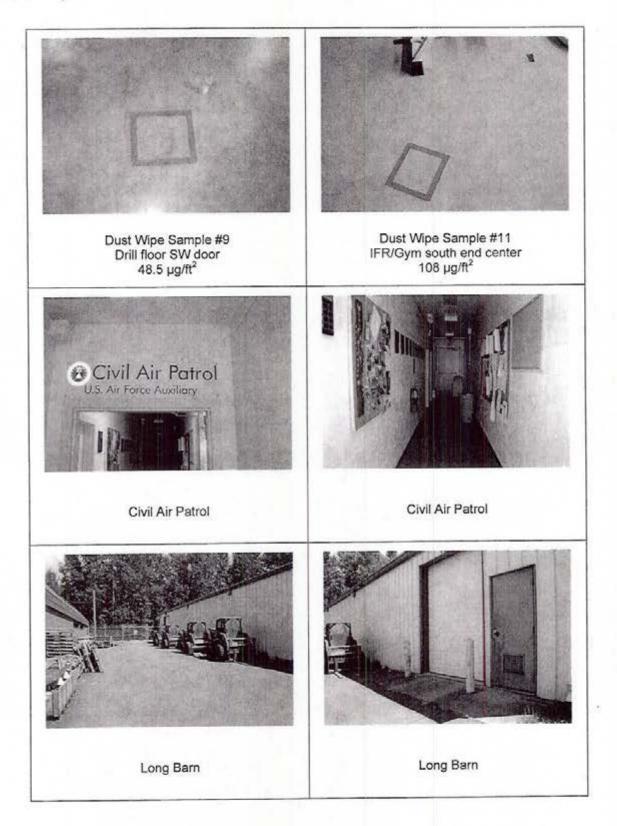
Site Photographs June 18-19, 2012



Attachment 3, Page 4

Bellingham Armory Follow-up IH Site Assistance Visit

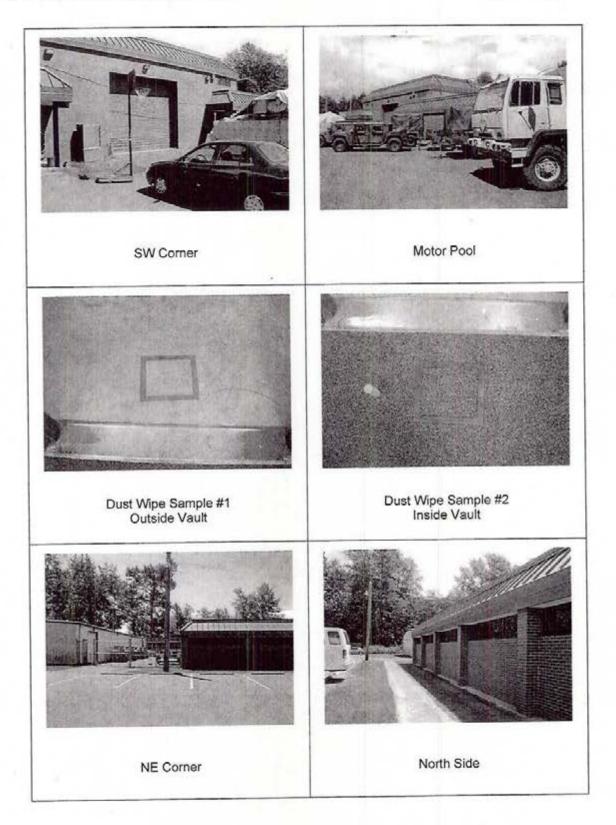
Site Photographs June 18-19, 2012



Attachment 3, Page 5

Bellingham Armory Follow-up IH Site Assistance Visit

Site Photographs June 18-19, 2012



Attachment 3, Page 6

2

RESERVOIRS ENVIRONMENTAL, INC. 5801 Logan St., Suite 100

Denver CO 80216

TABLE ANALYSIS:

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 239286-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001 |
| Client Project Description: | Bellingham Armory (WA) |
| Date Samples Received: | July 2, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | July 9, 2012 |

| Client ID Number | Lab ID N | umber | Sample Area (sq.ft.) | LEAD (µg) | Reporting Limit (µg/ft ²) | LEAD CONCENTRATION (µg/ft ²) |
|---------------------|-------------|--------|----------------------------|--------------|---|--|
| ARNG12-001-3-1 | EM | 890117 | 0.50 | 18.8 | 12.5 | 37.5 |
| ARNG12-001-3-2 | EM | 890118 | 0.50 | 7.3 | 12.5 | 14.5 |
| ARNG12-001-3-3 | EM | 890119 | 0.50 | 12.5 | 12.5 | 25.0 |
| ARNG12-001-3-4 | EM | 890120 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-3-5 | EM | 890121 | 0.50 | 35.3 | 12.5 | 70.5 |
| ARNG12-001-3-6 | EM | 890122 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-3-7 | EM | 890123 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-3-8 | EM | 890124 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-3-9 | EM | 890125 | 0.50 | 24.3 | 12.5 | 48.5 |
| ARNG12-001-3-10 | EM | 890126 | 0.50 | 1,703 | 12.5 | 3,405 |
| ARNG12-001-3-11 | EM | 890127 | 0.50 | 53.8 | 12.5 | 108 |
| ARNG12-001-3-12 | EM | 890128 | 0.50 | 11.8 | 12.5 | 23.5 |
| ARNG12-001-3-13 | EM | 890129 | 0.50 | 10.0 | 12.5 | 20.0 |
| ARNG12-001-3-14 | EM | 890130 | 0.50 | BRL | 12.5 | BRL |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

P: 303-964-1986 F: 303-477-4275

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1-865-RESI-ENV www.reilab.com

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Bellingham Facility Information

| 1. | Date Prepared: | 6/18-19/2012 | | Non-Responsiv ation Code (UIC) |
|-----|--|---|--------------------------------|-----------------------------------|
| 2. | Names (and company nar | me) of Personnel Conductir | ng IH SA | - Cole & Associates |
| 3. | Facility Name and Brief So Admin, Recruiting, Funer | | es Conducted at Facility: | Bellingham Armory |
| 4. | Facility Address: | 3928 Williamson Way, I | Bellingham, WA. 98226 | |
| 5. | Primary Unit Assigned to | Facility <u>: C Co 81st B</u> | STB | |
| 6. | Co-Tenant Units Assigned | d or Working Within Facility | (LIST ALL): Civil Air Pat | trol Leases NE Wing |
| 7. | | lity: 31,000 DOC: 19 | | |
| 8. | | 8-4 | | |
| 9. | Number of Work Bays: | NA | | |
| 10. | Equipment Density and T | ype: | | |
| | a. List Nomenclature S | Serviced or Maintained at F | acility: <u>NA</u> | |
| | b. List Total Number fo | or Each Nomenclature Serv | rices or Maintained at Fac | sility: <u>NA</u> |
| 11. | Total Number of Personn | el: <u>5 Full Time</u> Drill We | eekend: 1 X (Month) Up 1 | to 80 |
| 12. | No. of Admin Personnel (| Include AGR, Fed., Tech., | IDT, State or Contract En | nployee): 2 AGR |
| 13. | No. of Maintenance Pers | onnel (Include AGR, Fed., | Tech., IDT, State or Contr | ract Employee): <u>0</u> |
| 14. | Total Number of Personr | el Enrolled in the Hearing (| Conservation Program: | NA |
| 15. | Total Number of Personr | nel Enrolled in the Respirato | ory Protection Program: | NA |
| 16. | Total Number of Personr | nel Enrolled in the Medical | 3urveillance Program: | NA |
| 17. | Total Number of Personr | nel Enrolled in the Vision Pr | ogram: NA | |
| 18. | Non-Responsiv | mail address, Commercia 60) 676-2040, or 6170, | I Telephone Number and or 6176 | Unit Assigned to: |
| 19. | Safety Officer: a. E-mail | address, Commercial Teler | hone Number and Unit A | Assigned to: |
| 20. | Facility Telephone Numb | ber:(360) 676- | 2051 F | Fax: (360) 676-2145 |
| | | | | |

Bellingham Army National Guard <u>Armory</u> Survey Checklist

Five lead wipe samples collected from drill Yes floor (take samples from dusty horizontal floor surfaces) Yes, occasionally on drill floor. Mostly off site at Are any weapons cleaned in the facility, if training centers. YTC etc. yes where are they cleaned? Additional lead wipe samples taken from Mostly in targeted areas. 25% of the rest of the building - -(on floor areas only) Is there a converted indoor firing range? IFR yes however not converted If so collect additional wipe samples IAW the SOW. Is there any peeling paint? Take bulk Minimal. Mostly worn paint sample if able. Are there any signs of water damage or None mold? Any suspected ACM? Where and what None condition is it in. Bulk sample if able. Quality of housekeeping Adequate N/A State Maintains HVAC maintenance plan in place? N/A State Maintains Overall condition of HVAC system N/A Obtained CO2, Temp, RH monitoring Container outside HAZMAT inventory on hand (make copies for the report), MSDS available for Locker inside container MSDS at the Right to Know Center on the wall by the all materials. drill floor. No chemical inventory list New Container by long barn HAZMAT storage, Condition of lockers, Flammables locker inside. Fairly organized but no if outside storage building is used is it inventory list ventilated and does it meet OSHA standards. Not an issue. Evidence of monthly fire extinguisher Yes inspections

| Annual fire extinguisher inspections tags current | Not an issue, Yes, for the most part |
|---|---|
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | N/A, None on site |
| 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) | N/A None on site |
| Any Photo labs | No |
| Any hazardous noise sources | No |
| Light levels checked throughout building | N/A |
| Breaker panels properly labeled with no exposed wiring | yes |
| Check building occupancy How many military personnel, how many civilian personnel | 3-5 Full time Combat units, engineer Admin |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | Yes, See attached sheet |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Yes |
| Obtain two lead air samples | No Upon Request Only |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Yes |
| Name of Armory, POC , phone <i>#</i> , address and organizations in Armory | Bellingham Armory 3928 Williamson way Bellingham, WA 98226 |
| (Add Checklist to Report) | UIC Non-Responsive Co 81 st BSTB (Add Checklist to Report) |

COLE & ASSOCIATES TRAINING & CONSULTING, INC.

ENGINEERING, HEALTH, SAFETY, AND ENVIRONMENTAL

18 June 2012

US Army National Guard Bureau Industrial Hygiene Southwest 10510 Superfortress Ave, Suite C Mather, CA, 95655

Subject: ARNG12-001-3 Bellingham Armory Recommendations

To Whom It May Concern:

Hazardous Materials / MSDS

 Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.(4.1.1)

Indoor Firing Range (IFR)

1. All items must be removed from the unconverted Indoor Firing Range (IFR) and all items possibly contaminated by lead dust should be thoroughly cleaned. Items may not be returned to the area until/unless the IFR is properly converted and passes a clearance inspection. (4.2.1)

Lead Dust

- Housekeeping Practices need to be improved as evident by the migration of lead dust. Inside and outside the vault areas and the indoor firing range (IFR) should be thoroughly cleaned, utilizing the SOP for Armory Clean-up, to help prevent migration of lead dust after every episode of weapons cleaning.(4.3.1.)
- The building should have signage posted at the entryway warning females who are pregnant and young children (under the age of seven) to the potential danger from exposure to lead dust at least until the IFR is converted and passes a clearance inspection. (4.3.2)

Written Programs and Training

- 1. A written Hazard Communication (HAZCOM) program should be implemented when hazardous chemicals are introduced into this facility and training documented annually, as required by regulation. (5.1.1)
- Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. (5.2.1)

| Non-Responsive | |
|---|-----|
| Cole & Associates Training & Consulting, In | IC. |

Cole & Associates Training & Consulting, Inc. + 18062 72nd Avenue South, Kent, WA 98032 (425) 793-5505 + (425) 793-5552 Fax + 1-877-455-BEAR + <u>www.ctcbear.com</u>



5 June 15

ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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

Industrial Hygiene Site Assistance Visit

Buckley Armory Converted Indoor Firing Range (CIFR) 455 North River Avenue Buckley, WA 98321

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 72 of 980 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

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

ARNG-CSG-P

14 JUN 2014

MEMORANDUM THR NOn-Responsive OHN, Bldg. 6224, 2n Division Dr, JBLM, WA 98433

FOR Commander, Buckley Armory Converted Indoor Firing Range (CIFR) 455 North River Avenue Buckley, WA 98321

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Buckley Armory Converted Indoor Firing Range (CIFR) 455 North River Avenue Buckley, WA conducted on 05 JUN 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 Indoor Air Quality (IAQ) assessment was conducted at the Buckley Armory Converted Indoor Firing Range (CIFR) 455 North River Avenue Buckley, WA conducted on 05 JUN 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 Industrial Hygienists 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 IHSAV.

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. Increase <u>housekeeping practices</u> with additional attention to areas identified to be over 40 ug/ft2 of lead dust in this facility and CIFR. Every episode of <u>weapons cleaning</u> should be followed with a

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Buckley Armory Converted Indoor Firing Range (CIFR) 455 North River Avenue Buckley, WA conducted on 05 JUN 2014

thorough clean-up of the cleaning area(s). (para. 3.2) (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:

(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).

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.

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Buckley Armory Converted Indoor Firing Range (CIFR) 455 North River Avenue Buckley, WA conducted on 05 JUN 2014

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>Washington</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



NGB, IHSW, CIV Regional Manager

| CARAN |
|-------|

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Buckley Armory, Converted Indoor Firing Range (CIFR), Buckley, WA Industrial Hygiene Southwest Violation Inventory Log

| CONTROL | | | | | 200 | | | | |
|-------------------------|---|------------------------------|-----|---|----------|----------|-----------|-----------|----------------|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abstract Bio) | SUSPENSE | ACTION | Estimated | DATE | REFERENCES |
| CLOSED | | | | (Abdumient Flan) | UNIE | CICINCOL | (shear | CONNECTED | |
| WABACIFR- 060514-3.2 | The lead wipe samples collected on the entryway to the IEP and drill hall floor had | Buckley | | Clean the entryway to the IFR and drill hall floor surfaces of the Buckley Armony achieve a | | | | | IHSW SOP, Lead |
| | lead concentrations ranging from 41-47 µg/ft2. | Armory - Drill Hall Floor | А | lead level less than 40 µg/ft2 following the guidance in the attached SOPs. | | | | | |

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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.

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- 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.
- 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.

- 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:

 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.



IH ASSISTANCE VISIT

Indoor Firing Range Washington Army National Guard Buckley Armory 455 North River Avenue Buckley, Washington 98321

June 30, 2014

Prepared for:

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



May, 2018

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IH Assistance Visit WAARNG/IFR, Buckley, WA

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IHI Environmental Project No. AL147344

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EXECUTIVE SUMMARY

On June 5, 2014 Non-Responsive, CSP, of IHI Environmental (IHI), conducted an Industrial Hygiene (IH) Assistance Visit at the Washington Army National Guard, Buckley Armory, Indoor Firing Range (IFR) located at 455 North River Avenue, Buckley, Washington 98321. The primary point of contact for information gathered during this survey wasNon-Responsive, (253) 512-8621, Non-Responsive

on-Responsive with the Washington Army National Guard assisted with this visit.

Note: Note: Visit. Access to the former Indoor Firing Range was obtained from Non-Responsive

The objectives of this IH Assistance Visit were to determine whether the firing range was operational or had been converted and to determine if the range and adjacent spaces were contaminated with lead residues above the limits outlined in the *Standard Operating Procedure (SOP) for Armory Cleanup & Follow-up Housekeeping.*

Significant findings for this IH Assistance Visit can be found in the Industrial Hygiene Southwest – Violation Inventory Log located in Appendix E 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.

IH Assistance Visit WAARNG/IFR, Buckley, WA **Executive Summary**

IHI Environmental Project No. AL147344

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

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1.0 INTRODUCTION

On June 5, 2014, Non-Responsive E, CSP, of IHI Environmental (IHI), conducted an Industrial Hygiene (IH) Assistance Visit at the Washington Army National Guard, Buckley Armory, Indoor Firing Range (IFR) located at 455 North River Avenue, Buckley,

Washington 98321. The primary point of contact for information gathered during this survey

wasNon-Responsive

Responsive vith the Washington Army National Guard assisted with this visit.

Note: Non-Responsive was not on site during this IH Assistance Visit. Access to the former Indoor Firing Range was obtained from Non-Responsive

1.1 Objectives

The objectives of this IH Assistance Visit were to determine if the firing range was operational or converted and to determine if the range and adjacent spaces were contaminated with lead residues above the limits outlined in NGP 420-15, *Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges*, and the IHSW Standard Operating Procedure (SOP) for *Armory Cleanup & Follow-up Housekeeping*.

1.2 Scope of Work

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

- evaluate the status of the firing range;
- collect lead surface wipe samples from the firing range, adjacent spaces, and any areas where weapons are cleaned; and
- provide a report of findings.

2.0 METHODS

2.1 Lead Wipe Sampling

Lead wipe samples were collected on floor surfaces in the IFR at the former firing line, midrange, and the bullet trap locations. Additional lead wipe samples were collected from wall surfaces within the IFR, the entryway floor, and three locations on the adjacent drill hall floor. Lead WipeTM brand wipes were used within a 100-square-centimeter template. The wipes used conform to American Society for Testing and Materials 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

IHI Environmental Project No. AL147344 Environmental for analysis, using National Institute for Occupational Safety and Health (NIOSH) Method 7300. See Appendix D for sample locations and Appendix C for laboratory results.

The Mather, California, office of Industrial Hygiene Southwest has developed a Standard Operating Procedure (SOP) for lead, which is a blend of OSHA. HUD, and Army regulations. Essentially, this SOP sets forth a criterion of 40 micrograms of lead per square foot (μ g/ft²) for converted indoor firing ranges, break rooms, floor surfaces, or any area that might be used for non-military functions. Additionally, a 200- μ g/ft² 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.

2.2 Quality Assurance

IHI 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;
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.
- 3.0 FINDINGS

3.1 Range Status and Description

The IFR at this armory was decommissioned as an active firing range and has not been used since 2007. In 2011, the IFR was cleaned by a contractor.

The walls of this IFR are constructed of painted concrete masonry units; the ceiling and floor have painted concrete surfaces. The supply air and exhaust ducts are covered with painted sheet metal. The bullet trap has been removed. There are personnel lockers, storage

IHI Environmental Project No. AL147344

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There are no civilian activities at this armory. Weapons are reportedly cleaned on tables on the drill hall floor.

3.2 Lead Wipe Sampling Results

The laboratory analytical results indicate that the lead concentrations on all of the wipe samples, except for three samples collected at the entryway to the IFR and the drill hall floor were below the $40-\mu g/ft^2$ standard outlined in the IHSW SOP for Armory Cleanup. The lead wipe samples collected at the entryway to the IFR and drill hall floor had lead concentrations ranging from $41-47 \mu g/ft^2$.

Table 1 in Appendix B contains the complete list of the sample results, and the laboratory analytical reports are included in Appendix C. A drawing identifying all sample locations is included in Appendix D. All of the findings of this visit are outlined in the Industrial Hygiene Southwest – Violation Inventory Log is located in Appendix E.

4.0 RECOMMENDATION

1. Clean the entryway to the IFR and drill hall floor surfaces of the Buckley Armory to achieve a lead level less than 40 μ g/ft², following the guidance in the attached SOP.

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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, IHI'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. IHI assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of IHI, 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 IHI 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

and approved by:

<u>June 24, 2014</u> Date

Senior Scientist

IH Assistance Visit WAARNG/IFR, Buckley, WA IHI Environmental Project No. AL147344

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7.0 TECHNICAL ASSISTANCE

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **Non-Responsive** at 801-466-2223, 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 if the operations change, or the personnel are incapable of following the recommendations.

IH Assistance Visit WAARNG/IFR, Buckley, WA IHI Environmental Project No. AL147344

APPENDIX A

References

AR 385-10, The Army Safety Program

Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910. Occupational Safety and Health Standards

NGP 420-15, Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges

IHSW, Standard Operating Procedure for Armory Cleanup & Follow-up Housekeeping Recommendations

| Sample Number | Collection Date | Location | Result µg/ft ² |
|------------------|--------------------|--|------------------------------|
| 344-01 | 6/5/2014 | Former Bullet Trap - Floor | 33 |
| 344-02 | 6/5/2014 | Former Mid Range - Floor | 15 |
| 344-03 | 6/5/2014 | Former Firing Lane - Floor | 14 |
| 344-04 | 6/5/2014 | North Wall Behind former Bullet Trap | <12 |
| 344-05 | 6/5/2014 | South West Wall Between Former Firing Lanes and Mid Range | <12 |
| 344-06 | 6/5/2014 | Attached Storage Room - Floor | 12 |
| 344-07 | 6/5/2014 | Entryway - Floor | 41 |
| 344-08 | 6/5/2014 | South West Drill Hall - Floor | 33 |
| 344-09 | 6/5/2014 | South East Drill Hall - Floor | 47 |
| 344-10 | 6/5/2014 | Center Drill Hall - Floor | 43 |
| 343-07 | 6/1/2014 | Field Blank | <12 |

Lead Wipe Sample Results



ANALYTICAL REPORT

Report Date: June 11, 2014

Non-Responsive

Analytical Baculto

IHI Environmental 640 East Wilmington Avenue Salt Lake City, UT 84106 Phone: (801) 466-2223 Fax: (801) 466-9616



Workorder: <u>34-1415761</u> Client Project ID: AL147344/Buckley, WA IFR Purchase Order: AL147344 Project ManagerNon-Responsive

| Sample ID: 344-01 | | | 14 14 14 14 14 14 14 14 14 14 14 14 14 1 | Collected: 06/05/2014 |
|-------------------------|------------------------------------|--------------------------------|--|--|
| Lab ID: 1415761001 | Sampling Location: Buckley, WA IFR | | | Received: 06/06/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Leo g Parameter: Are | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | 的时间的。如此是中国的大学的中国 |
| Lead | 3.5 | 33 | 1.3 | |

| Lead | 1.6 | | | |
|--|---|--------------------|----------------|---|
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| 'hod: NIOSH 7300 Mod. | Media: Lead Dust Wipe Sampling Parameter: Area 100 cm ² | | | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Sample ID: <u>344-02</u> Lab ID: 1415761002 | Sampli | ing Location: Bu | ickley, WA IFR | Collected: 06/05/2014 Received: 06/06/2014 |

| Sample ID: <u>344-03</u> Lab ID: 1415761003 | Sampli | Sampling Location: Buckley, WA IFR | | |
|--|-----------|------------------------------------|----------------|--|
| Method: NIOSH 7300 Mod. | | | ad Dust Wipe | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | 、 信仰, 其人, 是他, 是他, 自己的, |
| Lead | 1.5 | 14 | 1.3 | |

| Sample ID: <u>344-04</u> Lab ID: 1415761004 | Sampli | ng Location: Bu | ckley, WA IFR | Collected: 06/05/2014 Received: 06/06/2014 |
|--|-----------|--------------------------------|----------------------------|---|
| Method: NIOSH 7300 Mod. | Samplin | Media: Lea g Parameter: Are | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <12 | 1.3 | |

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

www.alsglobal.com

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Environmental

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ANALYTICAL REPORT

Workorder: 34-1415761 Client Project ID: AL147344/Buckley, WA IFR Purchase Order: AL147344 Project Manager: Non-Responsive

| Sample ID: 344-05 | | | | Collected: 06/05/2014 | |
|-------------------------|-----------|------------------------------------|----------------------------|--|--|
| Lab ID: 1415761005 | Sampli | Sampling Location: Buckley, WA IFR | | | |
| Method: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 | |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | の思い、フロコールの構成語言 | |
| Lead | <1.3 | <12 | 1.3 | | |

| Sample ID: 344-06 | | | | Collected: 06/05/2014 |
|-------------------------|-----------|------------------------------|----------------------------|--|
| Lab ID: 1415761006 | Sampli | Received: 06/06/2014 | | |
| Method: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: An | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 1.3 | 12 | 1.3 | |

| Sample ID: 344-07 | | | | Collected: 06/05/2014 | |
|------------------------|-----------|------------------------------------|----------------------------|--|--|
| Lab ID: 1415761007 | Sampl | Sampling Location: Buckley, WA IFR | | | |
| ethod: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 | |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | 的形式工作。這個人對於中國的 | |
| Lead | 4.4 | 41 | 1.3 | | |

| Sample ID: 344-08 | | | | Collected: 06/05/2014 |
|-------------------------|-----------|--------------------------------|----------------------------|--|
| Lab ID: 1415761008 | Sampli | ng Location: Bu | ckley, WA IFR | Received: 06/06/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Lea g Parameter: Are | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 3.6 | 33 | 1.3 | |

| Sample ID: 344-09 | | | | Collected: 06/05/2014 |
|-------------------------|-----------|------------------------------|----------------------------|--|
| Lab ID: 1415761009 | Sampli | ng Location: Bu | ickley, WA IFR | Received: 06/06/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | ····································· |
| Lead | 5.1 | 47 | 1.3 | |

| Sample ID: <u>344-10</u> Lab ID: 1415761010 | Sampli | ing Location: Bu | ickley, WA IFR | Collected: 06/05/2014 Received: 06/06/2014 |
|--|-----------|------------------------------|----------------------------|---|
| ethod: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 4.6 | 43 | 1.3 | |

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ANALYTICAL REPORT

Workorder: 34-1415761 Client Project ID: AL147344/Buckley, WA IFR Purchase Order: AL147344 Project Manager: Non-Responsive

Report Authorization

| Method | Analyst | Non-Responsive |
|-----------------|----------------|----------------|
| 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 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.iowadnr.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.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.

NA = Not Applicable.

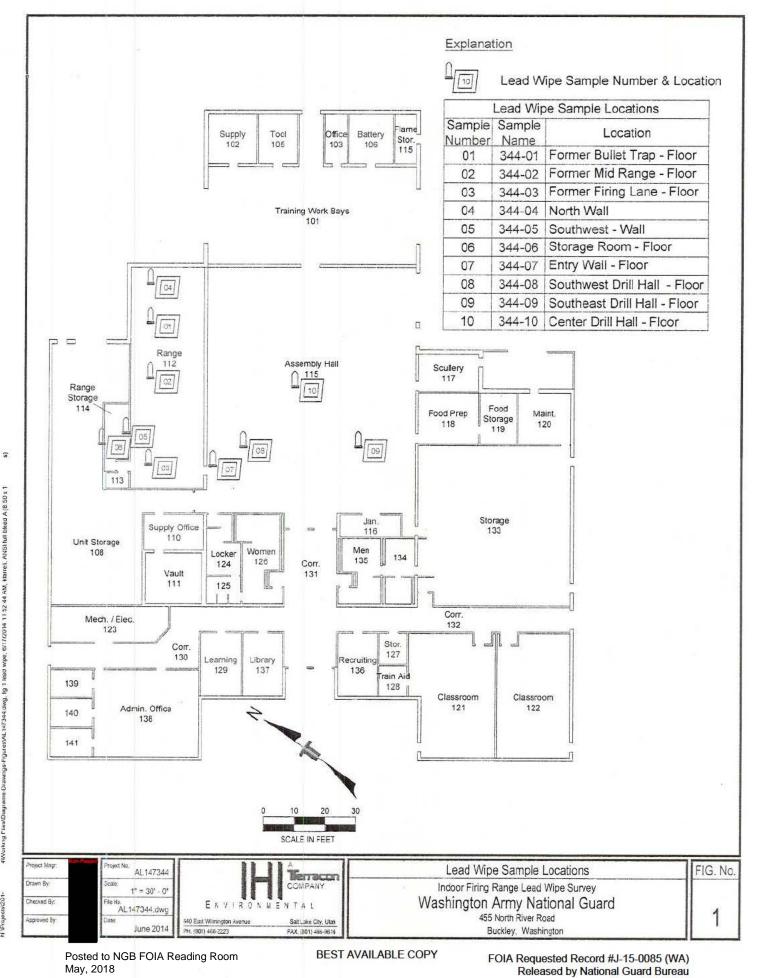
** No result could be reported, see sample comments for details.

< This testing result is less than the numerical value.

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

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1g 1 lead wipe, 6/17/2014 11:52 44 AM, ktarrell, ANSI full bleed A (8 50 x 1 4Working Files/Diagrams-Drawings-Figures/AL147344.0wg.

51201-

| COLON A |
|--------------|
| - |
| Contra State |

Doctod to NCR EQUA

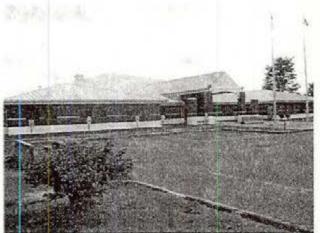
Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Buckley Armory, Converted Indoor Firing Range, Buckley, WA

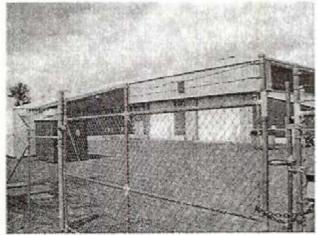
| CONTROL | | | | CODOCTURE A OFFICIAL | | NOLLON | | | |
|---------------------|---|---|-----|--|----------|--------|------------------|-----------------------|----------------|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | A Performant Block | SUSPENSE | ACTION | ACTION EStimated | AUTION ISIIMATED DATE | REFERENCES |
| CLOSED | | | | (upper upper and upper a) | | NONINI | (sheon | CONTROL IED | |
| WABA-060514- 3.2 | WABA-060514- The lead wipe samples 3.2 collected on the entryway to the IFR and drill hall floor had lead concentrations ranging from 41-47 µg/f12. | Buckley Armory - Drill Hall Floor | 4 | Clean the entryway to the IFR and drill hall floor surfaces of the Buckley Armory achieve a lead level less than 40 µg/tt2 following the guidance in the attached SOPs. | | | | | IFSW SOP, Lead |

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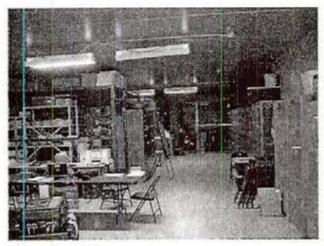
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Photograph 1 Washington Army National Guard, Buckley Armory, Front, Exterior



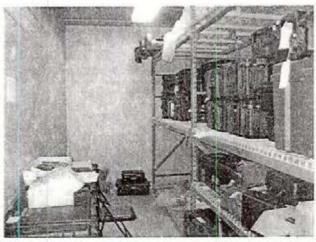
Photograph 2 Washington Army National Guard, Buckley Armory, Rear, Exterior



Photograph 3 View of converted IFR from former firing lanes to bullet trap area



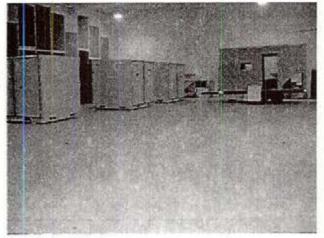
Photograph 4 View of converted IFR from former bullet trap area to firing lanes

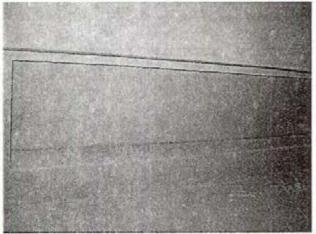


Photograph 5 Attached storage room



Photograph 6 Attached restroom



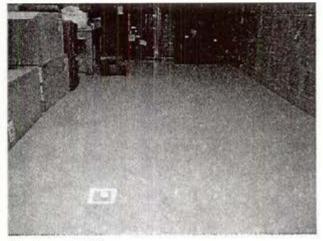


Photograph 7 View of the drill hall floor

Photograph 8 View of capped former supply air duct



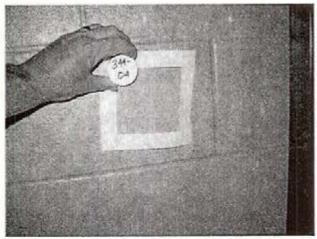
Photograph 9 Location of lead wipe sample number 344-01



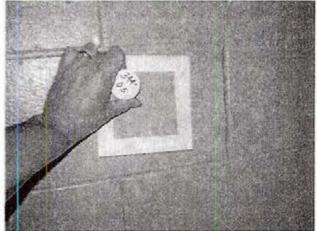
Photograph 10 Location of lead wipe sample number 344-02



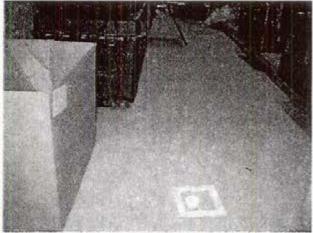
Photograph 11 Location of lead wipe sample number 344-03



Photograph 12 Location of lead wipe sample number 344-04



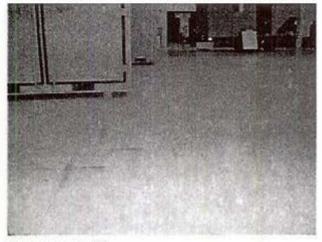
Photograph 13 Location of lead wipe sample number 344-05



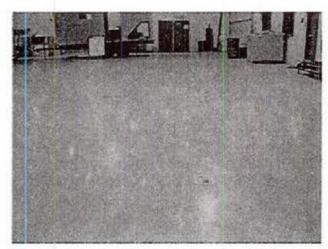
Photograph 14 Location of lead wipe sample number 344-06



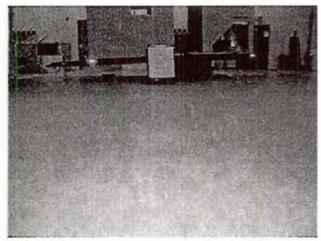
Photograph 15 Location of lead wipe sample number 344-07



Photograph 16 Location of lead wipe sample number 344-08



Photograph 17 Location of lead wipe sample number 344-09



Photograph 18 Location of lead wipe sample number 344-10

FACILITY INFORMATION

(Information listed in First Section) (1" Few Paragraphs/Pages of Report)

1. Date Prepared: June 5, 2014

2. Names (and Company Name) of Personnel Conducting Industrial Hygiene Site Assistance Visit: Non-Responsive

3. Facility Name and Brief Summary of Primary Activities Conducted at Facility: Washington Army National Guard – Buckley Armory - IFR

4. Facility Address: 455 North River Avenue, Buckley, Washington 98321

5. Primary Unit Assigned to Facility (Ensure to capture and provide Unit Identification Code (UIC)): Non-Responsive

6. Co-Tenant Units Assigned or Working Within Facility (LIST ALL): Company A, 1st Battalion, 19th Special Forces Group (Airborne)

7. Square Ft. Area of Facility: ~18,500 ft²

8. Work Schedule: 0800 - 1630 hours - Monday-Friday

9. Number of work bays: None

10. Equipment Density and Type: N/A

a. List Equipment Nomenclature Serviced or Maintained at Facility: N/A

b. List Total Number for Each Nomenclature Serviced or Maintained at Facility: N/A

11. Total Number of Personnel: 8

12. No. of Admin. Personnel (Include Status – 4 AGR, 4 Active Duty Operational Support (ADOS), Traditional Guardsmen Contract Employee): 2 Part-Time State Janitor

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

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17. Total Number of Personnel Enrolled in the Vision Program: 0

18. Facility Commander: Non-Responsive

a Email address, Commercial Telephone Number and Unit Assigned to: Non-Responsive (253) 512-8621, Company A, 1st Battalion, 19th Special Forces Group (Airbome)

19. Safety Officer: Non-Responsive

a. Email Address, Commercial Telephone Number and Unit Assigned to: Non-Responsive (253) 512-8621, Company A, 1st Battalion, 19th Special Forces Group (Airborne)

20. Facility Telephone Number: (253) 512-8621

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Summary of Recommendations for WAARNG Buckley Armory, IFR

3.2 Lead Wipe Sampling Results

Recommendation

Clean the entryway to the IFR and drill hall floor surfaces of the Buckley Armory achieve a lead level less than 40 μ g/ft² following the guidance in the attached SOPs.

1]

Lead

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.
- Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc., home for laundering.
- 7. HEPA vacuum
- 8. Six (6) mill plastic bags to dispose of waste.
- 9. Waste water containers.

Disposal of Waste Water and Cleaning Materials:

- 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.
- 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 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.

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:
 - 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.

SOP FOR ARMORY CLEANUP

1. General.

1.1 Objective.

1.1.1. The purpose of this SOP (Standard Operating Procedure) is once a lead dust hazard has been identified and excess exists, how to lower the level of lead dust to afford a safe building, which is clean enough for all personnel exposed to this potential hazard.

1.2 Description of An Armory.

1.2.1 Armories provide a space for units to support and train soldiers.

1.2.2 The facility is utilized by Army National Guard (ARNG) family members, usually in a recreational or festive setting. This may include all members and all ages of a given family.

1.2.3 The Armory can be used for community activities, which may include all age levels.

1.3 Responsibilities.

1.3.1 It is the ARNG specialty branches, e.g., Industrial Hygiene (IH), Occupational Health & Safety's, responsibility to notify occupants of any known health risk within their facility.

1.3.2 It is the building managers responsibility to warn any users of this facility about potential hazards by, e.g., verbal, written or warning signs.

1.3.3 The ultimate responsibility falls back on the TAG of each state.

2. Background.

2.1 IH Investigation.

2.1.1 The IH community found unexpectedly high levels of lead dust during a normal IH investigation (survey) in an armory that had an Indoor Firing Range (IFR) within it. Wipe samples were taken in another armory without an IFR, only to find that this armory had higher than expected levels of lead dust, also.

2.1.2 Each ARNG Regional Industrial Hygienist has planned to survey all their armories spearheaded by the Midwest regional office, to determine the magnitude of these findings.

2.1.3 About 2/3rds of the armories tested so far, did not have "a clean bill of health". Now the IH community will attempt to discern where the contamination is coming from and also, give guidance on how to deal with these contaminant.

2.1.4 Air sampling of the armories tested have shown very low levels of lead dust in the breathing area. Dust wipe samples have varied in quantities present but have exceeded the EPA's floor standard and the ARNG IFR guidelines.

3. Relevant Standards and Guidelines.

3.1 Airborne Lead.

3.1.1 The Occupational Safety and Health Administrations (<u>OSHA</u>) Permissible Exposure Level (PEL) for <u>airborne lead</u> is 50 micrograms per cubic meter (ug/m3), averaged over an 8-hour work shift. The OSHA action level is 30 ug/m3.

3.2 Blood Lead Level (BLL).

3.2.1 OSHA requires that personnel who are exposed to <u>airborne lead</u> above the PEL be offered medical surveillance that includes blood lead level monitoring. Personnel with total **BLL above 50** micrograms per deciliter (ug/dl) of blood are required to be removed from occupational lead exposures until the BLL drops back to 40.

3.2.2 Women who may become pregnant who are exposed to lead should consult with their physician. Fetal and newborn BLLs are similar to those of

6. Armory Cleanup.

6.1 High Test Result.

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

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

6.1.1.2 Unless your state public health has other guidance, e.g., post signage to warn personnel who are pregnant or of child bearing age, or under the age of 7 y/o.

6.1.1.3 Signs stating "No smoking, drinking or eating, application of make-up without washing of hands prior to activity."

6.2 Cleaning of Building. Before proceeding into the cleanup mode, first, discus with your Environmental office what procedures they would recommend and then coordinate your efforts with local agencies, if warranted.

6.2.1 The building, and dusty materials and equipment in it should be cleaned one time to reach the dust lead levels appropriate for the function of this facility, e.g., used by full-time personnel only, utilized by adults or children 7 y/o, or order children only, or utilized by pregnant individuals and/or children under the age of 7. NOTE: This type cleaning implies that this is not a facility that has an active Indoor Firing Range. For facilities with active ranges, these facilities should be monitored with wipe samples taken over the drill floor area by the Range Custodian quarterly, to ascertain the level of lead is at the required level for your particular facility and situation.

6.2.1.1 This cleanup can be accomplished using a HEPA vacuum (a very tedious and long operation) and then by utilizing a wet method with "Spic n Span" or something equivalent to this detergent - -using wet rags to wipe down surfaces and mops soaked in this solution to do floor area. NOTE: Personal protective gloves, rubber boots or protective disposable shoe/boot covers should be used during this procedure and personnel's

clothing should be washed separately from their families, if they have young children at home. Personnel should wash their hands after performing this operation to assure lead contaminants are not ingested.

6.2.1.2 Frequent changing out of the water used is vital. Disposal of this hazardous waste water and rags/mop heads, Personal Protective Equipment (PPE), etc., should be coordinated with your Environmental office.

6.2.2 Clean all ductwork where lead was found. EPA has a protocol specifically for replacing or cleaning lead in dust form in HVAC systems. EPA Office of Pollution Prevention and Toxics, "*Reducing Lead Hazards When Remodeling Your Home*" www.epa.gov/opptintr/lead/rrpamph.pdf.

6.2.3 Continue to enforce good housekeeping and hygiene practices. These measures make good sense to minimize exposures to any toxic chemicals in the workplace.

6.2.4 Provide lead awareness training to the general workforce and any occupants of your facility.

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

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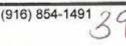
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Guam + Hawaii + California + Oregon + Washington + Nevada + Arizona + Idaho + Utah + Wyoming + Montana + New Mexico + Nebraska

Industrial Hygiene Site Assistance Visit

Buckley Readiness Center 455 N. River Road Buckley, WA 98321

10510 Superfortress Avenue, Suite C, Mather, CA 95655



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

ARNG-CSG-P

31 JUL 2012

MEMORANDUM FOR NOn-Responsive The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Buckley Readiness Center at 455 N. River Road, Buckley, WA on 11 JUL 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

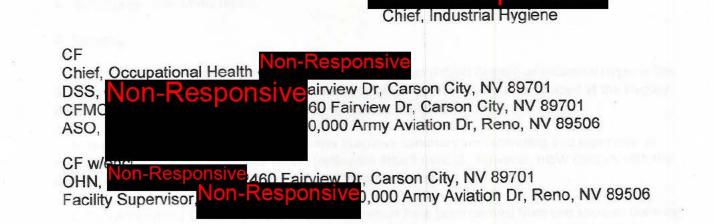
3. **Recommendations**. A risk assessment code (RAC) has been assigned to each health hazard identified in the report. Each type of RAC (health, safety, ergonomic) uses slightly different matrices to determine the overall severity, however a RAC 1 should be considered Critical; a RAC 2 is Serious. Follow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

a. No RAC 1, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Buckley Readiness Center on 11 JUL 2012.

4. The technical point of contact is Non-Responsive at (775) 771-3956. For follow up information, contact the Occupational Safety & Health Office, Non-Responsive OHN Non-Responsive at (253) 912-3832.



2

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Buckley Readiness Center, 455 North River Road, Buckley, WA conducted on 11 July 2012.

b. <u>Obtain clearance sample report</u> from the laboratory to ensure lead dust levels are within acceptable levels and safe for occupancy. Clean noted areas that exceeded the recommended 40 ug/ft2, e.g. Bathroom west of Indoor Firing Range, Drill hall, Mechanical equipment room and mezzanine above IFR, b y using attached Clean-up SOP and <u>improving Housekeeping Practices</u>. (para. 4.3.1) (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.

 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

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Buckley Readiness Center, 455 North River Road, Buckley, WA conducted on 11 July 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 <u>Washington</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 Doc Miller at (775) 771-3956 or via email at



NGB, IHSW, CIV Industrial Hygiene

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

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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:

- 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. 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)
 - 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.

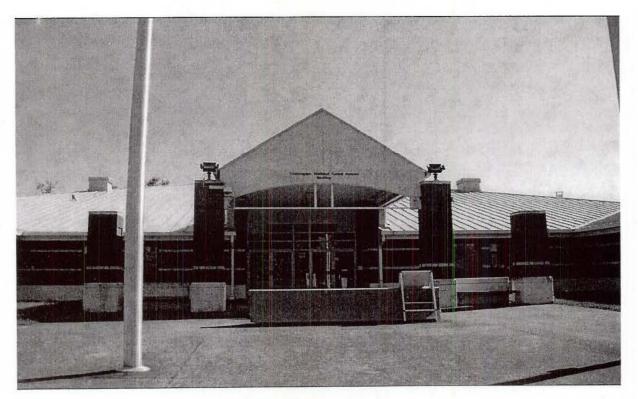
NOTE: Clearance sampling/testing is to be accomplished by certified personnel after these cleanup procedures are followed. If the area is an average Armory, occupied by adults only, for which you are cleaning and is not a Converted IFR space, you may continue to utilize the Armory space before the officials 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.

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Industrial Hygiene Services SITE ASSISTANCE VISIT



Army National Guard – Buckley Readiness Center 455 N. River Road Buckley, WA 98321

Prepared for:

National Guard Bureau Industrial Hygiene Southwest

By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-4

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Follow-up IH SAV July 11, 2012

1.0 EXECUTIVE SUMMARY

On July 11, 2012, Non-Responsive and Non-Responsive of Cole & Associates Training & Consulting, Inc. conducted a follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Buckley Readiness Center located at 455 N. River Road, Buckley, WA 98321.

The primary point of contact for information gathered during this survey was **NOn-Responsive** at (253) 512-8624. The survey was conducted at the direction of **Non-Responsive** of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walk-through survey of the facility including the drill floor, office areas, locker rooms, supply areas, classrooms, and maintenance bay areas. Existing programs, i.e., respiratory protection, hazardous materials program, etc. were also scheduled to be reviewed for compliance, however, access to the information was not available.

The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual re-inspection.

A lead dust wipe sampling plan was prepared for the facility to ensure residual lead dust is kept to a minimum. These areas included the drill floor/assembly hall, weapons vaults, indoor firing ranges (IFR's closed or converted), including in and around the IFR and areas where weapons are cleaned or handled.

The following inspection areas were evaluated with specific recommendations or corrective actions offered:

1.1 Recommendation 4.1.1

Maintain a facility-wide HAZMAT/HAZCOM program and keep MSDS and inventory logs current for each flammables locker and chemical storage area.

1.2 Recommendation 4.1.2

There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a hazardous materials inventory.

1.3 Recommendation 4.2.1

Obtain clearance report including laboratory results for dust wipe sampling to ensure lead dust levels are within acceptable levels and safe for occupancy.

1.4 Recommendation 4.3.1

Housekeeping practices need to be improved as evident by the migration of lead dust. The mechanical room floor and the entire drill floor including surrounding areas should be thoroughly cleaned utilizing the SOP for Armory Clean-up.

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Follow-up IH SAV July 11, 2012

1.5 Recommendation 5.1.1

A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned.

1.6 Recommendation 5.2.1

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

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Follow-up IH SAV July 11, 2012

2.0 INTRODUCTION

On July 11, 2012, Non-Responsive of Cole & Associates Training & Consulting, Inc. conducted a follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Buckley Readiness Center located at 455 N. River Road, Buckley, WA 98321.

The Buckley Readiness Center supports the Alpha Co. 1/19 SFG(A). The UIC (unit identification code) is Currently there are no co-tenants.

This facility employs 4 full time guard members on a day to day basis and houses up to 70 members on drill weekends which are once a month. The armory was constructed from 1992-1994 and is approximately 23,000 square feet.

The armory has general offices and administrative areas, to include command and administrative offices, several classrooms, three arms vaults (none were accessible), male & female latrines, a locker room, a boiler room, janitorial room, and a kitchen. Some areas were inaccessible due to unit deployment and minimal staff.

This facility has an IFR that has been recently converted. There are also two maintenance bays, a battery room with an eye wash station/deluge shower, and POL storage area which reportedly have never been used. The bays were originally intended to conduct maintenance on high performance boats used by the special forces unit.

According to Non-Responsive weapons are stored on site in the weapons vaults when units are not deployed, however only occasionally are cleaned at the facility during weekend drills. This has taken place in the range and on the drill floor.

Findings in this report were obtained by observations at the facility and through interviews with personnel.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

- Section 2 Introduction
- Section 2.3- Recurring Observations
- Section 3 Survey Procedures
- Section 4 Survey Observations and Findings
- Section 5 Written Programs and Approvals
- Section 6 Limitations and Approvals

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Follow-up IH SAV July 11, 2012

2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility personnel. There were no major issues regarding recurring observations.

2.3.1 Lead Dust Hazards

Previous inspection reports indicate high lead dust levels.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, storage/locker room and facility entrance way. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust*. The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (uq/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials \ MSDS

A hazardous materials storage room is located on the NE corner of the building with an exterior access just outside the maintenance bay. This area was inaccessible, however personnel reported a flammable storage locker with MSDS binders to be inside.

A spot check of the chemical storage areas was attempted during this survey, however all areas were inaccessible due to deployment and minimal staff to gain access. A Hazardous Materials Inventory list for the facility could not be located.

4.1.1 Recommendation

There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a hazardous materials inventory.

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Follow-up IH SAV July 11, 2012

4.1.2 Recommendation

Maintain a facility-wide HAZMAT/HAZCOM program and keep MSDS and inventory logs current for each flammables locker and chemicals storage area.

4.2 Indoor Firing Range

The facility has an Indoor Firing Range (IFR) that has been recently converted. The conversion included the removal of the backstop, ventilations systems, cleaning, and encapsulation. A clearance inspection was performed following conversion activities although paperwork could not be produced at the time of the inspection.

4.2.1 Recommendation

Obtain clearance report including laboratory results for dust wipe sampling to ensure lead dust levels are within acceptable levels and safe for occupancy.

4.3 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.3.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

| Sample Number | Location Floors | Results (µg/ft ²) |
|----------------|------------------------|----------------------------------|
| ARNG12-001-4-1 | IFR firing line Floor | 40 |
| ARNG12-001-4-2 | IFR target end Floor | 28 |
| ARNG12-001-4-3 | Bathroom west of IFR | 167 |
| ARNG12-001-4-4 | Drill floor S entrance | 18.5 |

| Table | 4.3.A - | Lead | Dust-Wi | pe | Results |
|-------|---------|------|---------|----|---------|
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Follow-up IH SAV July 11, 2012

| Buckle | y Readiness Center | | July 11 |
|--------|--------------------|--|---------|
| | ARNG12-001-4-5 | Drill floor SW corner | 765 |
| | ARNG12-001-4-6 | Drill floor north entrance | 19.5 |
| 1 | ARNG12-001-4-7 | Drill floor center | 25.5 |
| Ì | ARNG12-001-4-8 | Drill floor E. door by scullery | 37.5 |
| | ARNG12-001-4-9 | Mechanical equipment room | 230 |
| | ARNG12-001-4-10 | Mechanical room , mezzanine Above IFR | 129.5 |
| | ARNG12-001-4-11 | SE classroom | BRL |
| | ARNG12-001-4-12 | Facility main entrance | BRL |
| | ARNG12-001-4-13 | Work Bay/Gym (West end) | 14 |
| | ARNG12-001-4-14 | Work Bay/Gym (East end) | 33.5 |
| | ARNG12-001-4-15 | Kitchen/food prep area | 67.5 |
| | ARNG12-001-4-16 | Floor inside locker room | 32.5 |
| | ARNG12-001-4-17 | Administration office | BRL |
| | ARNG12-001-4-18 | Outside the vault S of supply office | 61.6 |
| | ARNG12-001-4-19 | Field Blank | BRL |

All floor areas tested resulted in dust lead levels at or below the recommended level of 200 μ g/ft² with the exception of sample #5 on the drill floor and sample #9 in the mechanical room. The samples taken on the drill floor had at least some levels of lead ranging from 18.5 to 765 μ g/ft². Because of this the recommendations are as follows:

4.3.1 Recommendation

Housekeeping practices need to be improved as evident by the migration of lead dust. The mechanical room floor and the entire drill floor including surrounding areas should be thoroughly cleaned utilizing the SOP for Armory Clean-up.

4.4 Kitchen Range Hood

Washington Army National Guard

The purpose of an exhaust hood is to provide a method of collecting, as nearly as possible, all of the grease produced from the cooking process while furnishing a means of removing heat, smoke and odors from the cooking area.

A sufficient volume of air movement (capture velocity) must be provided to effectively draw grease particles and cooking vapors directly from the cooking surface to the grease extractors. This airflow removes cooking odors and keeps grease particles from settling onto nearby surfaces.

ARNG12-001-4

Follow-up IH SAV July 11, 2012

The NFPA 96 standard identifies a TLV concentration of 5mg/m3 at500 CFM rate of exhaust. The air velocity through any duct shall be not less than365.8 m/min (1200 ft /min).*NFPA. Lighting shall be no less than 70 foot candles at each work station.

A direct reading multi-meter was used to take air flow intake and Illumination readings for the kitchen range hood. The range hood is a wall canopy design with equipment access panels on the side, a sprinkler system, and two overhead lights. Ventilation readings can be found in Attachment 5 and illumination readings in Attachment 6.

Noise readings were also taken with kitchen equipment (range hood, mixers, etc.) turned on separately and with all appliances on simultaneously. Readings did not exceed recommended noise levels of 85db.

Table 4.4.1 Kitchen Range Hood Air Velocity

| | Air Velocity (CFM - Ci | ubic Feet Per Minute) |
|---------|------------------------|-----------------------|
| Room | CFM | Location |
| Kitchen | 3276 | Range Hood |

Table 4.4.1.2 Kitchen Range Hood Illuminations

| | Lighting F/C Foot Candles | |
|---------|---------------------------|------|
| Room | Location | F/C |
| Kitchen | Range Hood (Left) | 18.8 |
| Kitchen | Range Hood (Right) | 22.5 |

Illumination levels were below recommended minimum standards for kitchens. Replacing luminaries above stove with higher watt bulbs would greatly improve lighting conditions. As there is no cook assigned to the facility, and the kitchen is not used on a regular basis, this recommendation should be viewed as precautionary.

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

Due to multiple deployments, no programs have been re-established and most areas were inaccessible. Consequently, there were no known centrally located HAZMAT/HAZCOM programs on hand at the facility although it was reported that special force units are highly trained with up to date records and certifications.

Cole & Associates

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ARNG12-001-4

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Follow-up IH SAV July 11, 2012

5.1.1 Recommendation

A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned. The purpose of the HAZCOM Program is to inform employees about hazardous substances in the workplace, potential harmful effects of these substances and appropriate control measures. The primary tools of this program should include: warning labels, MSDSs and employee training.

5.2 Training

There were no training records maintained at the facility pertaining to occupational safety & health.

5.2.1 Recommendation

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

6.0 LIMITATIONS AND APPROVALS

6.1 Technical Assistance

Contact Non-Responsive of the Southwest Regional Industrial Hygiene Office, (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

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.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 136 of 980

Follow-up IH SAV July 11, 2012

Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| IH Technician: | n-Responsive | <u>6-15-12</u> Date |
|-----------------------|---|-------------------------|
| Quality Assurance: | Non-Responsive | <u>8/15/1</u> 2 Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manager: | Non-Responsive | Date |

NGB- Industrial Hygiene Southwest

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ARNG12-001-4

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 137 of 980 Industrial Hygiene Southwest

Violation Inventory Log

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

ARNG Buckley Readiness Center

Posted to NGB FOIA Reading Room May, 2018

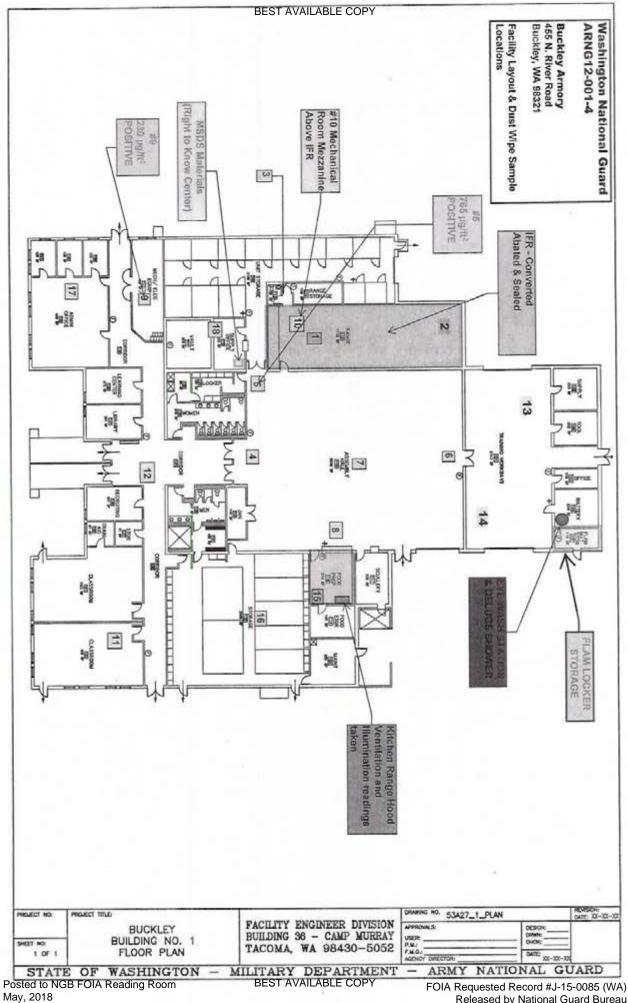
| CONTROL | | | | CORRECTIVE ACTIONS | SUSPENSE | ACTION | Estimated | DATE | REFERENCES |
|------------------------|--|---------------------------------------|-----|--|----------|-----------|-----------|-----------|--|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abatement Plan) | DATE | OICINCOIC | Cost(s) | CORRECTED | |
| WABUC-071112 4.1.1 | Hazardous materials inventory and MSDS could not be located. | Buckley Readiness Center | 4 | Maintain a facility-wide HAZMAT/HAZCOM program and keep MSDS and inventory logs current for each flammables locker and chemicals storage area. | | | | | 29 CFR 1910.1200 NGR 386-10, Chapter 6 DODI 6050.5 |
| WABUC-071112 4.1.2 | Inspectors were unable to verify that a HAZMAT / HAZCOM program was in place and up to date. | Buckley Readiness Center | 4 | There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a hazardous materials inventory. | | | | | 29CFR 19.1200, NGR 385-10, DODI 6050.5 NEPA NO 30 |
| WABUC-071112 4.3.1 | The lead dust levels exceeded the recommended level of 200 ug/ft2. | Drill Floor and Mechanical Room | e | Housekeeping practices need to be improved as evident by the migration of lead dust. The mechanical room floor and the entire drill floor including surrounding areas should be thoroughly cleaned utilizing the SOP for Armory Clean-up | | | | | 29 CFR 1910.1025 NG PAM 420-15 |
| WABUC-071112 5.1.1 | There were no known written programs maintained at the facility for HAZCOM. | Buckley Readiness Center | 4 | A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned. | | | | | 29CFR 19.1200, NGR 385-10, DODI 6050.5 |
| WABUC-071112- 5.2.1 | There were no training records maintained at the facility pertaining to occupational safety & health. | Buckley Readiness Center | 4 | Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. | | | | | 29CFR 19.1200, NGR 385-10, DODI 6050.5 |

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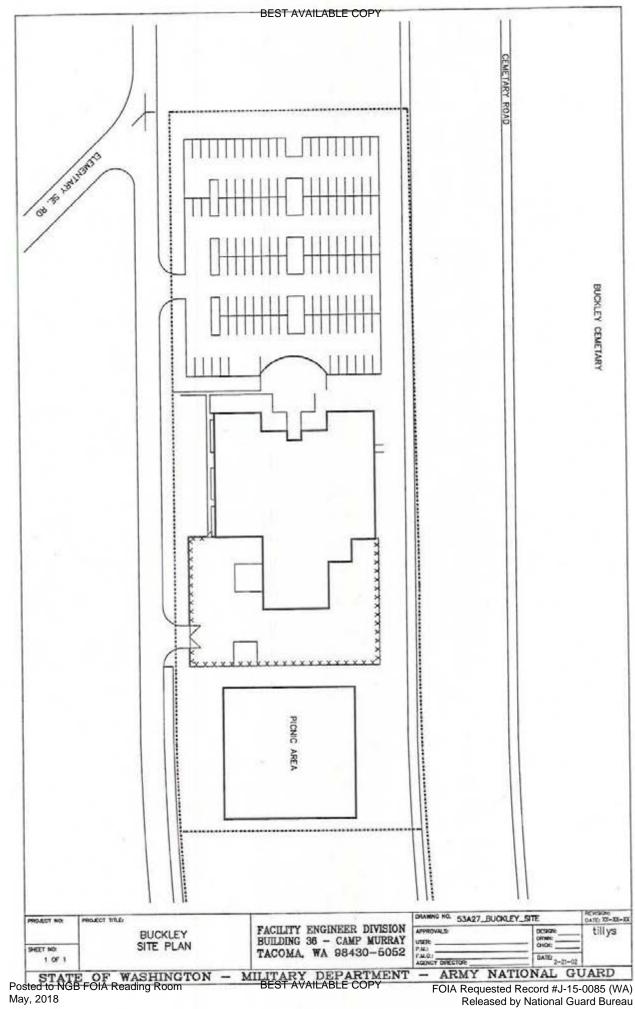
Reference DA FORM 4754 VER: 15 OCT 2009

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

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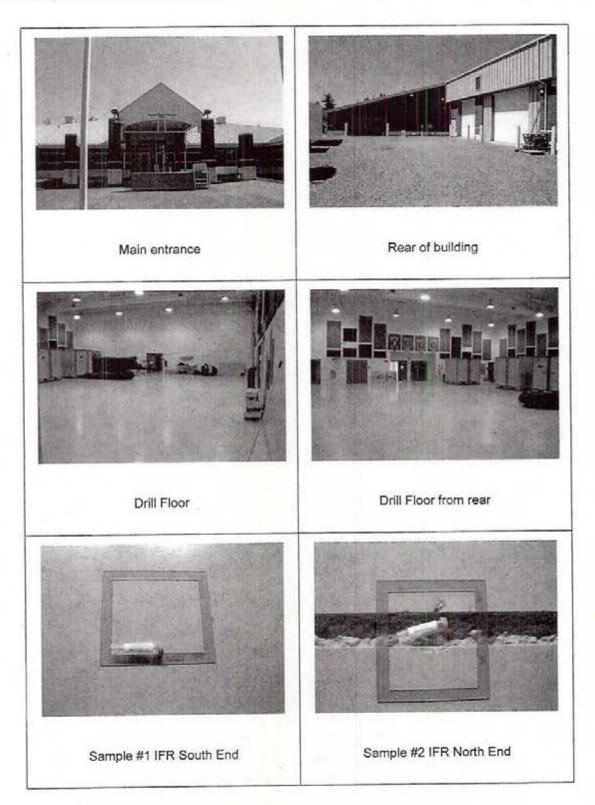
Released by National Guard Bureau Page 139 of 980



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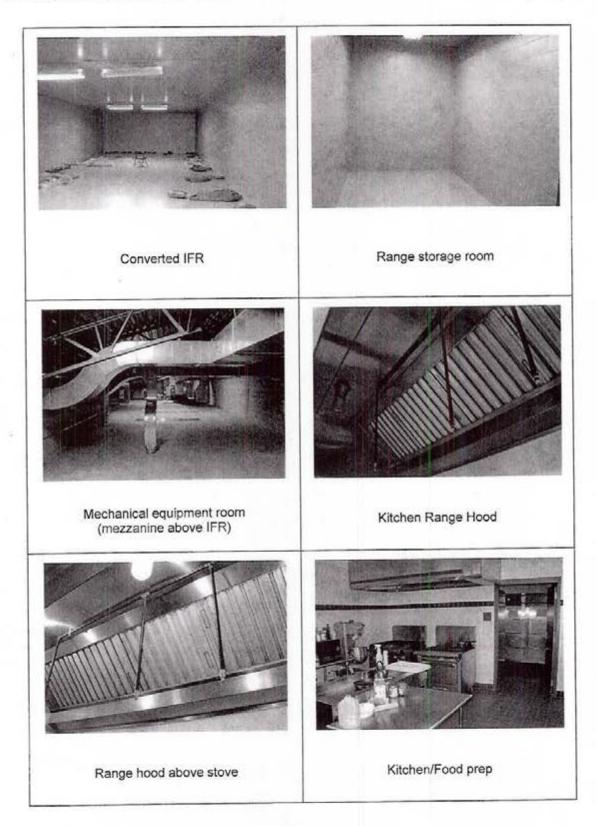
Buckley Readiness Center Follow-up IH Site Assistance Visit

Site Photographs July 12, 2012



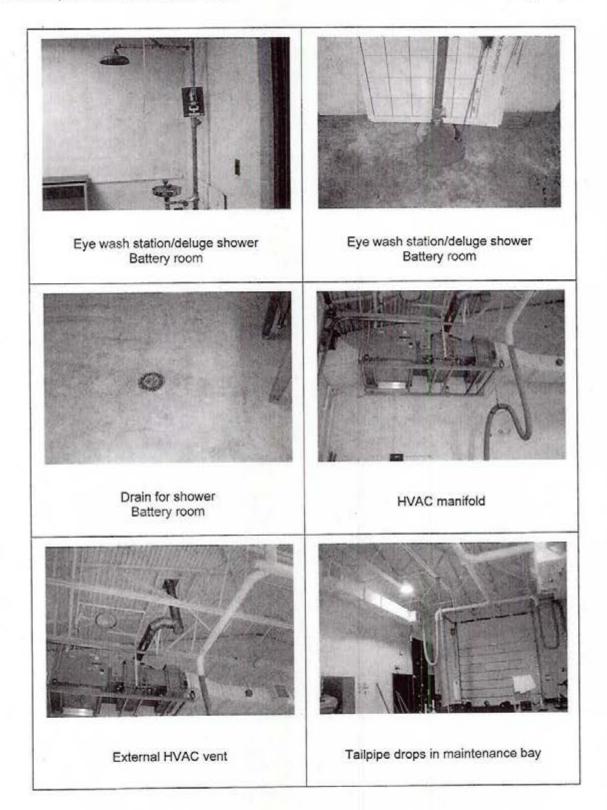
Attachment 3, Page 1

Buckley Readiness Center Follow-up IH Site Assistance Visit



Attachment 3, Page 2

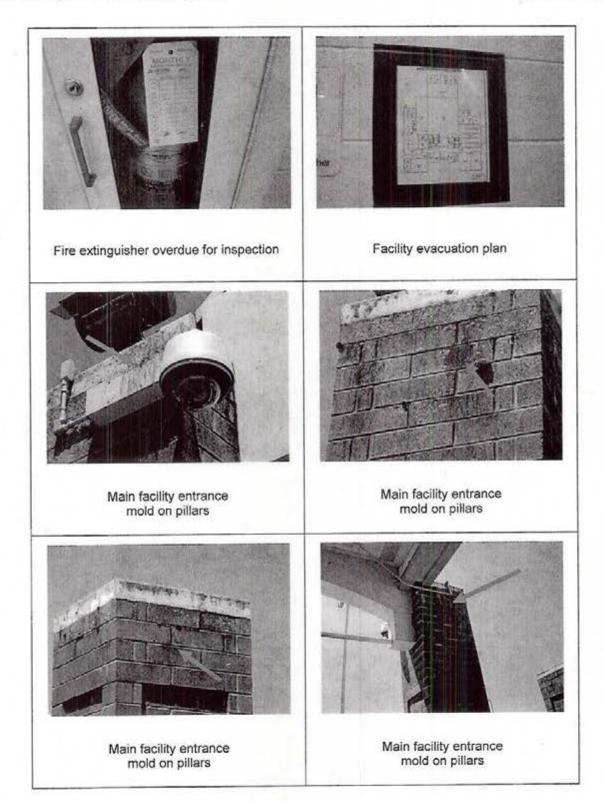
Buckley Readiness Center Follow-up IH Site Assistance Visit Site Photographs July 12, 2012



Attachment 3, Page 3

Buckley Readiness Center Follow-up IH Site Assistance Visit

Site Photographs July 12, 2012



Attachment 3, Page 4

RESERVOIRS ENVIRONMENTAL, INC. 5801 Logan St., Suite 100 Denver CO 80216

TABLE

ANALYSIS:

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 240207-1 |
|-------------------------------|---------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-4 |
| Client Project Description: | Buckley Readiness Center |
| Date Samples Received: | July 16, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | July 19, 2012 |

| Client | Lab | | Sample | LEAD | Reporting | LEAD |
|-----------------|------|--------|------------------|------|--------------------------------|--|
| ID Number | ID N | lumber | Area (sq.ft.) | (µg) | Limit (µg/ft ²) | CONCENTRATION (µg/ft ²) |
| ARNG12-001-4-1 | EM | 892519 | 0.50 | 20.0 | 12.5 | 40.0 |
| ARNG12-001-4-2 | EM | 892520 | 0.50 | 14.0 | 12.5 | 28.0 |
| ARNG12-001-4-3 | EM | 892521 | 0.50 | 83.5 | 12.5 | 167 |
| ARNG12-001-4-4 | EM | 892522 | 0.50 | 9.3 | 12.5 | 18.5 |
| ARNG12-001-4-5 | EM | 892523 | 0.50 | 383 | 12.5 | 765 |
| ARNG12-001-4-6 | EM | 892524 | 0.50 | 9.8 | 12.5 | 19.5 |
| ARNG12-001-4-7 | EM | 892525 | 0.50 | 12.8 | 12.5 | 25.5 |
| ARNG12-001-4-8 | EM | 892526 | 0.50 | 18.8 | 12.5 | 37.5 |
| ARNG12-001-4-9 | EM | 892527 | 0.50 | 115 | 12.5 | 230.0 |
| ARNG12-001-4-10 | EM | 892528 | 0.50 | 64.8 | 12.5 | 129.5 |
| ARNG12-001-4-11 | EM | 892529 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-4-12 | EM | 892530 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-4-13 | EM | 892531 | 0.50 | 7.0 | 12.5 | 14.0 |
| ARNG12-001-4-14 | EM | 892532 | 0.50 | 16.8 | 12.5 | 33.5 |
| ARNG12-001-4-15 | EM | 892533 | 0.50 | 33.8 | 12.5 | 67.5 |
| ARNG12-001-4-16 | EM | 892534 | 0.50 | 16.3 | 12.5 | 32.5 |
| ARNG12-001-4-17 | EM | 892535 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-4-18 | EM | 892536 | 0.50 | 30.8 | 14.0 | 61.6 |
| ARNG12-001-4-19 | EM | 892537 | 0.50 | BRL | 12.5 | BRL |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

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1-866-RESI-ENV www.reilab.com

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| Totals | TOTAL CFM | 3276 | NIA | NIA | NIA | N/A | N/A | N/A | N/A | NIA | NIA | NIA | NIA | NIA | NIA | N/A | N/A | N/A | N/A | NIA | N/A | NIA | N/A | N/A | N/A | N/A | NIA |
|--------------|----------------|---------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Tot | Total CF | 9 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Size | WIDTH | 18 | | | | | | | | | | | | | and and a | | | | | | | | | | | | |
| Vent Size | LENGTH | 48 | | | | | | | | | | | | | | | | | | | | | 1 | | | | |
| s | FPM | 546 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Calculations | No. of Rdgs | 5 | | | | | | | 2 | | | | | | | | | | | | | | | | | | |
| ü | Total | 2730 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 2 | 540 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | 550 | | | | | T | | | | | | | | | | | | | | | | | | | | |
| Readings | 3 | 590 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 61 | 690 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 360 | | | | | | | | | | | | | | | | | | | | | | | | | |
| tion | VENT No. | - | | | | | T | | | | | | | | | | | | | | | | | | | | |
| Location | ROOM | Kitchen | | | | | | | | | | | | | | | | | | | | | | | | | |

Ventilation. Jurksheet

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Illumination Study

Luminescence in Foot-candles (FC)

ARNG Buckley Readiness Center

| Sample # | Location / Description | FC |
|----------|--|------|
| Kitchen | Range Hood (Left) | 18.8 |
| Kitchen | Range Hood (Right) | 22.5 |
| 4 | | |
| | | |
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Attachment 7

Additional Supporting Documentation

Posted to NGB FOIA Reading Room May, 2018

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Buckley Facility Information

Date Prepared: 7/11/2012 Unit Identification Code (UIC) WTNGA0 1. Names (and company name) of Personnel Conducting IH SAV: Cole & Associates 2. Facility Name and Brief Summary of Primary Activities Conducted at Facility: Buckley Armory 3. readiness, training prep, administrative procedures, equipment prep, recovery operations Facility Address: 455 N. River Road, Buckley, WA 9832 4. Primary Unit Assigned to Facility: A/1/1 SEG (A) 5. Co-Tenant Units Assigned or Working Within Facility (LIST ALL):None 6. Square Feet Area of Facility: 23,000 sf DOC: 1992-1994 7. Work Schedule: M-F, weekends as directed by IAW IDT plans. 8. Number of Work Bays: 2 boat maintenance bays with 4 tailpipe drops. Never been used 9. Equipment Density and Type: NA 10. a. List Nomenclature Serviced or Maintained at Facility: MTOE Special Force Company level equipment b. List Total Number for Each Nomenclature Services or Maintained at Facility: HMMWV Series Services at Camp Murray Total Number of Personnel: Assigned 115 3-4 Full time Drill Weekend: 300 Drill once/month 11. No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 1ea AGR 12. No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 1 ea MDay 7 13. Total Number of Personnel Enrolled in the Hearing Conservation Program: 0 14. Total Number of Personnel Enrolled in the Respiratory Protection Program: 0 15. Total Number of Personnel Enrolled in the Medical Surveillance Program:_____0 16. Total Number of Personnel Enrolled in the Vision Program: 0 17. 18. Facility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to:_____ il, 253.512.8624 A/1/19/SFG(A) Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to:_____ 19. Fax: Facility Telephone Number: 253.512.8624 20.

Buckley 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 |
|--|--|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | Yes, in the range mainly. None cleaned on drill floor. |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes 18 samples total. 1 field blank. |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | Yes – converted recently. Clearance inspection performed. Waiting on documentation. 3 dust wipe samples today. |
| Is there any peeling paint? Take bulk sample if able. | None, worn but not peeling |
| Are there any signs of water damage or mold? | Yes, exterior various spots. |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | Past report indicate no inspection records on file, however DOC is 1992-1994. |
| Quality of housekeeping | Above average |
| HVAC maintenance plan in place? | N/A – State maintains |
| Overall condition of HVAC system | N/A – State maintains |
| Obtained CO2, Temp, RH monitoring | N/A |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | Unavailable - Due to multiple deployments, no programs have been re-established |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | Inaccessible hazardous storage room. Flam locker inside room. |

| Fire alarm in working conditionnot usually in place in older armories | Yes, tested regularly |
|--|---|
| Fire extinguishers in place and properly identified and mounted | Yes |
| Evidence of monthly fire extinguisher inspections | Not up to date |
| Annual fire extinguisher inspections tags current | Not up to date |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | Yes, in battery room by maintenance bay |
| 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) | No training programs available |
| Any Photo labs | N/A |
| Any hazardous noise sources | None |
| Light levels checked throughout building | N/A |
| 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 full time and approx 50 on drill weekends. 115 assigned to the unit. No civilian personnel. Administrative |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | None |
| Obtain two lead air samples | Upon request only N/A |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | (From left to right) ventilation readings 360, 690, 590, 550, 540 |
|--|---|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | 74.1 d at stove only 76.6 stove hood and mixer 66.6 just mixer |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Yes |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Yes |
| Name of Armory, POC, phone #, address and organizations in Armory | Buckley Armory Non-Responsive 455 N River Road Buckley, WA |
| (Add Checklist to Report) | (Add Checklist to Report) |

COLE & ASSOCIATES TRAINING & CONSULTING, INC.

ENGINEERING, HEALTH, SAFETY, AND ENVIRONMENTAL

July 11, 2012

US Army National Guard Bureau Industrial Hygiene - Southwest 10510 Superfortress Ave., Suite C Mather, California 95655

Subject: ARNG12-001-04 Buckley RC Recommendations

To Whom It May Concern:

Hazardous Materials / MSDS

- 1. Maintain a facility-wide HAZMAT/HAZCOM program and ensure that MSDS and inventories are updated (and purged) regularly. (4.1.1)
- There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a hazardous materials inventory. (4.1.2)

Indoor Firing Range (IFR)

 Obtain clearance report including laboratory results for dust wipe sampling to ensure lead dust levels are within acceptable levels and safe for occupancy. (4.2.1)

Lead Dust

 Housekeeping practices need to be improved as evident by the migration of lead dust. The mechanical room floor and the entire drill floor including surrounding areas should be thoroughly cleaned utilizing the SOP for Armory Clean-up.(4.3.1.)

Written Programs and Training

- 1. A written Hazard Communication (HAZCOM) program should be implemented facilitywide to include all units assigned. (5.1.1)
- Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. (5.2.1)

Signed,

Non-Responsive

Cole & Associates Training & Consulting, Inc.

Cole & Associates Training & Consulting, Inc. • 18062 72nd Avenue South, Kent, WA 98032 (425) 793-5505 • (425) 793-5552 Fax • 1-877-455-BEAR • <u>www.ctcbear.com</u>



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ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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

Industrial Hygiene Site Assistance Visit

Building # 1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA 98430

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 154 of 980



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

ARNG-CSG-P

12 JUN 2014

MEMORANDUM THRUNOn-Responsive OHN, Bldg. 6224, 2nd Division Dr, JBLM, WA 98433

FOR Commander, Joint Forces HD QTRS Building #1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA 98430

SUBJECT: Executive Summary for Industrial Hygiene Baseline Site Assistance Visit (IHSAV) for Joint Forces HD QTRS Building # 1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA conducted on 02 JUN 2014

- 1. References. See survey report.
- 2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Baseline Site Assistance Visit was conducted at the Joint Forces HD QTRS Building # 1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA conducted on 02 JUN 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. Improve <u>housekeeping practices</u> especially in areas identified in this report as being over 40 ug/ft2 from lead wipes taken.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 155 of 980

ARNG-CSG-P

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Joint Forces HD QTRS Building # 1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA conducted on 02 JUN 2014

(1) WAARNG Industrial Hygiene Technician should require access to vaults in the basement and take wipe samples off horizontal surfaces to identify if vault areas are a source of lead dust contamination.

(2) All areas used for weapons cleaning should be thoroughly cleaned after every episode of weapons cleaning, utilizing the Clean-up SOP provided in this report. (para. 4.1) (RAC 4)

b. Upgrade the <u>illumination levels</u> in identified areas noted in this report. Replace burnt out luminnaires, clean fixtures and paint walls a lighter color to help increase illumination, and maintain serviceable. Utilize task lighting for fine work and work needing additional lighting. (para. 4.4) (RAC 4)

c. Clean the <u>return air grilles</u> removing the dust accumulations to prevent possible bacteria or proliferation of fungal spores. (para. 4.5) (RAC 3)

d. The <u>attic mechanical space</u> that is posted as a non-permit confined space needs a locking doorway to limit access, mainly for maintenance personnel. (para. 4.9.1) (RAC 3)

e. Identify where <u>rodents</u> are entering the building & block access areas to prevent rodent access. Hire a contractor with knowledge of Hantavirus <u>remediation and decontamination</u> to thoroughly clean all contaminated areas, e.g. the attic space. (para. 4.9.2) (RAC 3)

f. Perform a visual evaluation of Building One's <u>emergency evacuation routes</u> and add illumination exit signs and directional arrows of travel where indicated in this report. (para. 4.9.4- 4.9.8) (RAC 4)

g. Provide <u>emergency exit hardware</u> and remove the <u>key lock</u> for the north basement exit door. (para, 4.9.9) (RAC 3)

h. Install a cover for the <u>electrical junction box</u> located near the ceiling of the 2nd floor storage room (Rm 315) and 1st floor (Rm 229) (para. 4.9.10 & 4.9.11) (RAC 4)

i. Install a GFCI electrical receptacle for the electrical outlet in the 1st floor men's latrine. (para. 4.9.12) (RAC 3)

j. Provide permanent <u>electrical wiring and a receptacle</u> in room 249, replacing the extension cord. (para. 4.9.13) (RAC 4)

k. Provide results of asbestos survey or contract with a licensed firm to perform an <u>asbestos survey &</u> <u>assessment</u>. If asbestos containing materials are found, awareness training shall be given to personnel working in building. (Exec. Summary) (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:

(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.

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Joint Forces HD QTRS Building # 1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA conducted on 02 JUN 2014

(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).

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>Washington</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.

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Joint Forces HD QTRS Building # 1 Camp Murray One Militia Drive, Bldg 1 Tacoma, WA conducted on 02 JUN 2014

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



NGB, IHSW, CIV Regional Industrial Hygiene Manager

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washington Industrial Hygiene Southwest Violation Inventory Log

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LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washington Industrial Hygiene Southwest Violation Inventory Log

| | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION OIC/NCOIC | Estimated Cost(s) | 2 | DATE |
|-----------------------|---|-----------------------|-----|---|------------------|---------------------|----------------------|---|------|
| LOSED | | | L | | | | 4 | | |
| VAB1-060214-4.4 | WAB1-060214-4.4 The general lighting is inadequate for tasks performed following areas: • Room 128 • Room 129 • Room 230 • Room 230 • Room 202 • Room 202 and Rooms 225 and 227 • Room 202 and Rooms 225 and 227 • Room 250 • Room 303, 305, and 306 – Attic and Mechanical Space • Rooms 314 and 316 • Hallway between Rooms 312 and 325 • Room 325 Southwest corner only | Building One | 4 | Upgrade the illumination levels in the attic space on the north side of the second floor, Rooms 303, 305, and 306 to 5 foot-candles. Upgrade the illumination levels in Rooms 128, 129, 132, 230 to 30 foot-candles. Upgrade the illumination levels in the Hallway between Rooms 312 and 325, Rooms 314 and 316, Hallway on 1st Floor between Room 202 and Rooms 225 and 227 to 10 foot- candles. Upgrade the illumination levels in Rooms 241, 250, 265, and the Southwest corner only of Room 325 to 50 foot-candles. | | | | | |
| NAB1-060214-4.5 | WAB1-060214-4.5 There are return air grilles throughout the building have accumulations of dust on them. | Indoor Air Quality | 3 | Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. | | | | | |
| WAB1-060214- 4.8.2 | Documentation of safety training was not available for Building One employees. | Safety Training | 4 | At a minimum, provide emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building One. | <u> </u> | | | | |
| WAB1-060214- 4.9.1 | The attic mechanical space is posted as a non-permit confined space. | Safety | ω | Provide a locking doorway for the mechanical room on the 2nd floor attic to restrict access to maintenance personnel only. | α. | | | | |

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LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washington Industrial Hygiene Southwest Violation Inventory Log

| WAB1-060214- 4.9.5 | WAB1-060214- 4.9.4 | WAB1-060214- 4.9.3 | WAB1-060214- | |
|---|---|--|--|--|
| The 1st floor emergency exit sign in the hallway does not have a directional arrow point to the emergency exit for the main foyer emergency exit. | The line of sight for emergency exit signs and emergency exits is not apparent in all areas of Building One. | There is a hole in the walking surface of the attic mechanical space that is used for telecommunication cable access. | There is evidence of rodent infestation, rodent droppings, urine stains, and nests in the addition, building occupants stated that rats and mice are periodically found above the ceiling tiles and can be heard in the supply air duct work for this building. | HAZARD DESCRIPTION |
| Safety | Safety | Safety | Safety | SITE |
| 4 | 4 | 4 | ω | RAC |
| Provide a directional arrow for the emergency exit sign that indicates the direction of travel to the emergency exit for the 1st floor. | Perform a visual evaluation of Building One and add illuminated exit signs where the line of sight is not clearly be visible at all times along designed emergency evacuation routes. | Provide a cover for the hole in the walking surface of the attic mechanical space that is used for telecommunication cable access. | Perform a visual survey Building One to determine where rodents are entering the building and block these holes to prevent rodent access. Hire a contractor with knowledge of Hantavirus remediation and decontamination to thoroughly clean the attic space mechanical room of rodent droppings, urine stains, and nests. Clean and decontaminate all supply and return air ducts in Building One for possible rodent droppings. Inspect and decontaminate as necessary the return air plenum in Building One for possible rodent infestation. | CORRECTIVE ACTIONS (Abatement Plan) |
| st | 5 | | | SUSPENSE |
| | | | | ACTION DIC/NCOIC |
| | | | | Estimated Cost(s) |
| | | | | DATE CORRECTED |
| 29 CHR 1910.37(b)(4) | 1910.37(b)(4) | 29 CFR 1910.23(a)(9) | Recommended Practice & 29 CFR 1910.142 (J) & 1910.141 (a)(5) | REFERENCES |

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| 1910.305(b)(2)(i) | | | | | Junction box located near the oeiling of the 2nd floor storage room (Room 315). | 4 | Safety | There is an open electrical junction box on the 2nd floor storage room (Room 315). | WAB1-060214- 4.9.10 |
|--|-----------|----------------------|---------------------|------------------|---|-----|--------|---|------------------------|
| (d) (2) 29 CFR | | | | | Provide emergency exit hardware and remove the key lock for the north basement exit door. | ω | Safety | The north basement exit door is not equipped with emergency exit hardware and has a lock on the door, which if locked, could trap employees inside if the building is occupied before or after normal working hours. | WAB1-060214- |
| 1910.37(b)(4) | | | | | Provide an illuminated exit sign with directional arrows for the intended travel direction that can be read from both sides for the basement emergency exit. | 4 | Safety | The illuminated exit for the basement emergency exit sign is only visible from the stairwell approach, but can be used by the Washington State employees who occupy the west side of the basement. | WAB1-060214- |
| 29 CFR 1910.37(a)(3) & 29 CFR 1910.36(d)(1) 29 CFR | | | | | Either remove the designations of emergency exits from the emergency evacuation plan for the Adjutant and Deputy Adjutant Generals offices or provide illuminated exit signs for these doors and ensure the doors leading to these exits remain unlocked. | 4 | Safety | There are two designated emergency exits on the posted occupant emergency evacuation plans for the offices occupied by the Adjutant and Deputy Adjutant Generals. These are private entrances and exits for the two individuals that occupy these office spaces. Neither of these exit doors are marked with illuminated exit signs and the doors leading to these emergency exits can be locked. | WAB1-060214- |
| 1910.37(b)(2) | | | | | Provide an illuminated exit sign for the 1st floor foyer emergency exit. | 4 | Safety | There is not an illuminated exit sign for the main foyer emergency exit. | -060214- |
| REFERENCES | CORRECTED | Estimated Cost(s) | ACTION OIC/NCOIC | SUSPENSE DATE | CORRECTIVE ACTIONS (Abatement Plan) | RAC | SITE | HAZARD DESCRIPTION | CONTROL NUMBER |

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

Industrial Hygiene Southwest

| | | 1 | ON | D HE Was |
|------------------|--|------------------------------|----------------------|----------------------------------|
| | | | Estimated Cost(s) | D HEALTH STANDARDS Washington |
| | | | DATE | NDARDS |
| | 29 CFR 1910.37(a)(3) & 29 CFR 1910.36(d)(1) | 29 CFR 1910.37(b)(2) | REFERENCES | |
| T AVAILABLE COPY | | quested Reco leased by Na | ational Gu | |

Industrial Hygiene Southwest

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washing

| 1910.305(b)(2)(i) | | | | | Install a cover for the electrical junction box located near the ceiling of the 2nd floor storage room (Room 315). | 4 | Safety | There is an open electrical junction box on the 2nd floor storage room (Room 315). | WAB1-060214- 4.9.10 |
|--|------|----------------------|---------------------|------------------|---|-----|--------|---|------------------------|
| 29 CFR 1910.36 (d) (2) | | | | | Provide emergency exit hardware and remove the key lock for the north basement exit door. | ω | Safety | The north basement exit door is not equipped with emergency exit hardware and has a lock on the door, which if locked, could trap employees inside if the building is occupied before or after normal working hours. | WAB1-060214- 4.9.9 |
| 29 CFK 1910.37(b)(4) | | | | | Provide an illuminated exit sign with directional arrows for the intended travel direction that can be read from both sides for the basement emergency exit. | 4 | Safety | The illuminated exit for the basement emergency exit sign is only visible from the stairwell approach, but can be used by the Washington State employees who occupy the west side of the basement. | WAB1-060214- 4.9.8 |
| 29 CFR 1910.37(a)(3) & 29 CFR 1910.36(d)(1) | | | | | Either remove the designations of emergency exits from the emergency evacuation plan for the Adjutant and Deputy Adjutant Generals offices or provide illuminated exit signs for these doors and ensure the doors leading to these exits remain unlocked. | 4 | Safety | There are two designated emergency exits on the posted occupant emergency evacuation plans for the offices occupied by the Adjutant and Deputy Adjutant Generals. These are private entrances and exits for the two individuals that occupy these office spaces. Neither of these exit doors are marked with illuminated exit signs and the doors leading to these emergency exits can be locked. | WAB1-060214- 4.9.7 |
| 29 CFR 1910.37(b)(2) | | | | | Provide an illuminated exit sign for the 1st floor foyer emergency exit. | 4 | Safety | There is not an illuminated exit sign for the main foyer emergency exit. | WAB1-060214- 4.9.6 |
| REFERENCES | DATE | Estimated Cost(s) | ACTION OIC/NCOIC | SUSPENSE DATE | CORRECTIVE ACTIONS (Abatement Plan) | RAC | SITE | HAZARD DESCRIPTION | |

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Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washington

| CONTROL | | | | AND | CHODENCE | <u></u> | Entimated | DATE | and the second second |
|--------------|----------------------------------|--------|-----|---|----------|-----------|-----------|-------------------|---------------------------|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abstement Plan) | DATE | OICINCOIC | Cost(s) | Cost(s) CORRECTED | REFERENCES |
| CLOSED | | | | (Anaminanti ran) | c i | | Interes | | |
| WAB1-060214- | A cover is missing from the | | | Install a cover for the electrical | | | | | 29 CFR 1910 305/0/11/0 |
| 4.9.11 | electrical receptacle in the 1st | Safatu | 4 | receptacle in the 1st floor | | | | | 1910.305()(1)(i) |
| | floor reproduction room (Room | | - | reproduction room (Room 229). | | | | | |
| C | 229) | | | | | | | | NICON TO Adiala |
| WAB1-060214- | The first floor men's room | | | Install a GFCI electrical | | | | | NFPA /0, Article |
| 4.9.12 | (Room 226) has an electrical | | | receptacle for the electrical | | | | | 210-8 |
| | receptacle within six feet of a | Calaba | ., | outlet in the first floor men's | | | | | |
| | water source and is not | Alaroo | • | room (Room 226) sink. | | | | | |
| | protected by a ground fault | | | | | | | | |
| WAB1-060214- | _ | | | Provide permanent electrical | | | | | 29 CFR 1910.305 |
| 4.9.13 | used in place of permanent | Colate | | wiring and a receptacle to | | | | | (g) (1) (III) (A) |
| | electrical wiring in a 1st floor | Visio | 4 | replace the use of the extension | | | | | |
| | office (Room 249). | | | cord in Room 249. | | | | | |

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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.

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- 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)



IH ASSISTANCE VISIT

Building 1 **One Militia Drive** Camp Murray, Washington 98430

June 30, 2014

Prepared for:

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



May, 2018

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Appendix B Assessment Criteria

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IHSW Lead Clean-up SOP's

IH Assistance Visit WAARNG - Building 1

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IHI Environmental Project No. AL147343

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EXECUTIVE SUMMARY

On June 2, 2014, Non-Responsive E, CSP, of IHI Environmental (IHI), conducted an IH Assistance Visit at the Washington Army National Guard, Building 1 located at One Militia Drive (Camp Murray), Tacoma, Washington 98430. The primary point of contact for information gathered during this survey was Non-Responsive (253) 521-8836, Non-Responsive

The objectives of this IH Assistance Visit were to perform the following activities:

- collect wipe samples for residual metals;
- evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are damaged;
- inspect the interior of Building 1 for water intrusion;
- measure illumination levels;
- 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 policies/programs, training, and record keeping; and
- conduct a safety walk-through evaluation and note any existing safety hazards.

Significant findings for this IH Assistance Visit can be found in the Industrial Hygiene Southwest – Violation Inventory Log located in Appendix J 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.

IH Assistance Visit WAARNG – Building 1

Executive Summary

IHI Environmental Project No. AL147343

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1.0 INTRODUCTION

On June 2, 2014, Non-Responsive E, CSP, of IHI Environmental (IHI), conducted an IH Assistance Visit at the Washington Army National Guard, Building 1 located at One Militia Drive (Camp Murray), Tacoma, Washington 98430. The primary point of contact for information gathered during this survey wa Non-Responsive 53) 521-8836,

ion-Responsive

1.1 Objectives

The objective of the IH Assistance survey was to evaluate the occupational environment of the Building 1 to determine the presence of operational health and safety risks, and make recommendations for corrective actions or follow-up work to manage those risks.

1.2 Scope of Work

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

- collect wipe samples for residual metals;
- evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are damaged;
- inspect the interior of Building 1 for water intrusion;
- measure illumination levels;
- 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 policies/programs, training, and record keeping; and
- conduct a safety walk-through evaluation and note any existing safety hazards.

2.0 FACILITY DESCRIPTION

Building 1 is located on Camp Murray. The building is a two story building with a partial basement and was built in 1927; a west wing with two stories was added later. The entire building is primarily devoted to administrative offices for personnel who manage operations for the Washington Army and Air National Guard. One portion of the basement houses Washington State employees.

Personnel assigned to the Joint Forces Headquarters work Monday-Friday between the hours of 8:00 AM and 4:30 PM.

IH Assistance Visit WAARNG – Building 1 IHI Environmental Project No. AL147343 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. See the drawing in Appendix E for complete survey information. A copy of the annual calibration certificate for this instrument is located in Appendix I.

3.5 Heating, Ventilation and Air-Conditioning System and Indoor Air Quality Building 1's heating, ventilation, and air-conditioning (HVAC) system was evaluated. This evaluation consisted of a visual inspection of the system to note any obvious problems.

Carbon dioxide (CO₂), temperature, and relative humidity were measured throughout the CST using a TSI IAQ-Calc[™] Meter. The unit was calibrated before use with certified zero gas and 1,000 parts per million (ppm) CO₂ span gas. See Appendix E for IAQ data.

Carbon dioxide is a normal constituent of exhaled breath and is commonly measured as a screening tool to evaluate whether adequate fresh outdoor air is being provided for the number of building occupants present. 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 Material [ASTM)] – International D6245-12, Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality). If a building exceeds this guideline, it should not be interpreted as an unhealthy or hazardous situation. An elevated CO₂ level is only an indication that the amount of outside air being brought into a building may be inadequate or poorly distributed and further investigation may be warranted.

In building areas where there are potential sources of CO₂ other than exhaled breath, the guidelines above cannot be used. The Occupational Safety and Health Administration (OSHA) standard for CO₂ should be used in these instances. The OSHA standard is an eighthour time-weighted average (TWA) of 5,000 ppm with a short-term 15-minute average limit of 30,000 ppm.

3.6 Hazard Communication and Hazardous Material Storage

Building 1's chemical inventory and Material Safety Data Sheet (MSDS) file were reviewed. Chemical storage areas, i.e., flammable storage cabinets/rooms (when appliciable), were also inspected.

IH Assistance Visit WAARNG - Building I IHI Environmental Project No. AL147343

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3.7 Sound Pressure Level Measurements

Sound pressure level measurements of specific noise sources in this facility (when present) were made using a Greenlee Sound Level Meter in the A-weighted decibel (dBA) and C-weighted decibel (dBC) ranges, using the slow meter response setting. A DD Form 2214 is provided in Appendix L. A copy of the annual calibration certificate for this instrument is located in Appendix I.

3.8 Safety Training and Record Keeping

An inspection of safety training programs and documentation was performed to determine if Building 1's site-specific training programs and annual documentation were relevant to mission operations.

3.9 General Safety Walk-Through

A limited Fire Life Safety code walk-through evaluation of Building 1 was performed to:

- document the presence of a fire alarm,
- determine if fire extinguishers are properly mounted and current on their monthly and annual inspections,
- · determine if eyewash station inspections are current, and
- · document any fire or safety hazards in Building 1.

3.9 Equipment Used

The following equipment was used for this survey.

| Туре | Model Number | Serial Number | Calibration Date |
|-----------------------------|-----------------|---------------|------------------|
| TSI IAQ-Calc™ Meter | 7575 - X | 7575X1306021 | 02/21/2014 |
| Extech Sound Level Meter | 407736 | 110604630 | 08/14/2013 |
| AEMC Light Meter | CA811 | 1057FFCY | 03/10/2014 |

The calibration certificates for these instruments are attached in Appendix I.

3.10 Quality Assurance

IHI employs, at a minimum, the following methods to help assure quality of field

investigations and reports:

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- · 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.
- 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 from horizontal surfaces throughout the facility for lead to determine compliance with the IHSW Standard Operating Procedure for lead and to evaluate general housekeeping measures. This SOP allows up to 40 μ g/ft² of lead for administrative areas, break rooms, and areas used by civilians. The SOP criterion for areas where the general public is not normally expected to access, e.g., tool rooms, maintenance bays, furnace rooms, boiler rooms, and specialized shop areas, is 200 μ g/ft².

Analytical results for lead indicate the following sample locations were above the SOP's contamination criterion.

- 1. Basement floor in front of vault Room 125; 49 µg/ft².
- 2. First floor storage room floor Room 230; 83 µg/ft2.

Note: There are two vaults on the east side of the basement. The source of the lead on the floors of the basement could be from these vault areas. These vaults were inaccessible during this IH Assistance visit.

See Table 1 in Appendix G for a table of results and a drawing of sample locations; the laboratory reports are supplied in Appendix H. Photographs were taken of each sampling point and are presented in Appendix C.

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Recommendations

1. Clean the south basement floors and floor for the first floor storage room (room 230) in Building 1 to achieve a lead level less than 40 μ g/ft² following the guidance in the attached SOPs in Appendix M.

2. Gain access to the two vaults on the east side of the basement and collect lead wipe samples to determine the floors of these vaults are the source of lead on the basement floor.

4.2 Painted Surface Evaluation

Peeling paint was observed on the door frame for the storage room vault door for Room 230. A sample of this painted surface was collected for lead analysis.

The analytical result for the paint chip sample collected from the door frame to the storage room vault door revealed the paint contained 0.0032 percent lead by weight; this paint sample is less than the HUD standard of 0.5 percent for lead. However, because there is measureable lead in this sample, OSHA's Lead in Construction Standard applies when renovation work that may affect this paint is conducted. See Appendix F for a data table and a drawing showing sample locations and Appendix G for the laboratory reports. Photographs were taken of each sampling point and are presented in Appendix C.

All painted surfaces should be considered lead-containing materials until determined otherwise.

Recommendations

1. Contact the State FMO, State Safety, and the State Environmental directorates before conducting any work that may disturb the integrity of the painted surfaces on the door frame for the storage room vault door for Room 230.

 Construction personnel must follow the requirements of the OSHA Lead in Construction Standard, 29 CFR 1926.62, if they perform activities involving these painted surfaces that could create lead dust or fume.

4.3 Water Intrusion Evaluation

There were three areas on the first floor that had water damaged ceiling tiles none of the wall systems were observed with any visible signs of water damage. There were no apparent signs of fungal growth on any of the ceiling tiles.

Recommendation

None

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4.4 Illumination

Illumination levels that were measured throughout Building 1 can be found in Appendix E. 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, workbench, or aircraft 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 requirement 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 general lighting is inadequate for tasks performed following areas:

- Room 128
- Room 129
- Room 132
- Room 230
- Room 241
- Hallway on 1st Floor between Room 202 and Rooms 225 and 227
- Room 250
- Room 265
- Rooms 303, 305, and 306 Attic and Mechanical Space
- Rooms 314 and 316
- Hallway between Rooms 312 and 325
- Room 325 Southwest corner only

Note: The room numbers on the floor plan do not correspond to the actual room numbers marked on door frames throughout the building.

Recommendations

1. Upgrade the illumination levels in the attic space on the north side of the second floor, Rooms 303, 305, and 306 to 5 foot-candles.

2. Upgrade the illumination levels in Rooms 128, 129, 132, 230 to 30 foot-candles.

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IHI Environmental Project No. AL147343 3. Upgrade the illumination levels in the Hallway between Rooms 312 and 325, Rooms 314 and 316, Hallway on 1st Floor between Room 202 and Rooms 225 and 227 to 10 foot-candles.

4. Upgrade the illumination levels in Rooms 241, 250, 265, and the Southwest corner only of Room 325 to 50 foot-candles.

4.5 Indoor Air Quality

There is a split-unit heating and air-conditioning (HVAC) units located on each floor of Building 1. The temperatures in Building 1 are controlled by representatives of the Washington Army National Guard Facilities group. There are return air grilles throughout the building have accumulations of dust on them.

Carbon dioxide concentrations ranged from 498 to 712 parts per million throughout the facility, which should not result in building occupant complaints with respect to body odors. Building air temperatures ranged from 71 to 74°F and relative humidity was between 48 and 51 percent during the testing period in Building 1. Air temperatures were within the recommended comfort range of 68-75°F and the relative humidity was within the recommended comfort range of between 30 and 60 percent. Humidity levels above 60 percent can result in the proliferation of bacteria and fungi, while levels below 30 percent can cause dry eyes, skin, and mucous membranes.

Recommendation

Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores.

4.6 Hazardous Materials Use and Storage

4.6.1 Material Safety Data Sheets (MSDS) and Chemical Inventories

There are no chemicals used by members of this building; the only chemicals stored in this building are used by Washington State employees who store building maintenance and cleaning products. MSDS files and chemical inventories were not evaluated as part of this IH Assistance Visit; however, there is an MSDS file located in the janitor's closet for the building maintenance products stored in this building.

Recommendation

None

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4.6.2 Flammable Storage Cabinets

There are no flammable storage cabinets used by the personnel who occupy this building.

Recommendation

None

4.7 Sound Pressure Level Surveys

There is not an industrial kitchen or hazardous noise producing pieces of equipment located in Building 1.

Recommendation

None

4.8 Safety Policies, Procedures, and Training Documents

4.8.1 Safety Policies and Procedures

There were no safety policies and procedures found at the site; however, safety-related information is available electronically on the Share Drive.

4.8.2 Training Documents

Documentation of safety training was not available for Building 1 employees.

Recommendation

At a minimum, provide emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 1.

4.9 General Safety Walk-Through

1. The attic mechanical space is posted as a non-permit confined space. According to OSHA Standard 1910.146 a "Confined space" means a space that:

(1) Is large enough and so configured that an employee can bodily enter and perform assigned work; and

(2) Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and

(3) Is not designed for continuous employee occupancy.

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The mechanical space technically falls into the category of a confined space and access to this area should be limited.

2. There is evidence of rodent infestation, rodent droppings, urine stains, and nests in the attic mechanical space. In addition, building occupants stated that rats and mice are periodically found above the ceiling tiles and can be heard in the supply air duct work for this building. Deer mice carry Hantavirus in all parts of Washington State and the presence of rodent infestation in a mechanical space with supply air distribution ducting should not be overlooked.

3. There is a hole in the walking surface of the attic mechanical space that is used for telecommunication cable access.

4. The line of sight for emergency exit signs and emergency exits is not apparent in all areas of Building 1.

5. The 1st floor emergency exit sign in the hallway does not have a directional arrow point to the emergency exit for the main foyer emergency exit.

6. There is not an illuminated exit sign for the main foyer emergency exit.

7. There are two designated emergency exits on the posted occupant emergency evacuation plans for the offices occupied by the Adjutant and Deputy Adjutant Generals. These are private entrances and exits for the two individuals that occupy these office spaces. Neither of these exit doors are marked with illuminated exit signs and the doors leading to these emergency exits can be locked.

8. The illuminated exit for the basement emergency exit sign is only visible from the stairwell approach, but can be used by the Washington State employees who occupy the west side of the basement.

9. The north basement exit door is not equipped with emergency exit hardware and has a lock on the door, which if locked, could trap employees inside if the building is occupied before or after normal working hours.

10. There is an open electrical junction box on the 2nd floor storage room (Room 315).

 A cover is missing from the electrical receptacle in the 1st floor reproduction room (Room 229).

12. The first floor men's room (Room 226) has an electrical receptacle within six feet of a water source and is not protected by a ground fault circuit interrupter (GFCI).

 There is an extension cord used in place of permanent electrical wiring in a 1st floor office (Room 249).

14. All electrical receptacles equipped with GFCI receptacles were found in an operational condition and tripped at 7 milliamps.

Recommendations

1. Provide a locking doorway for the mechanical room on the 2nd floor attic to restrict access to maintenance personnel only.

IH Assistance Visit WAARNG - Building 1 2. Perform a visual survey Building 1 to determine where rodents are entering the building and block these holes to prevent rodent access.

Hire a contractor with knowledge of Hantavirus remediation and decontamination to thoroughly clean the attic space mechanical room of rodent droppings, urine stains, and nests.

4. Clean and decontaminate all supply and return air ducts in Building 1 for possible rodent droppings.

5. Inspect and decontaminate as necessary the return air plenum in Building 1 for possible rodent infestation.

6. Provide a cover for the hole in the walking surface of the attic mechanical space that is used for telecommunication cable access.

Perform a visual evaluation of Building 1 and add illuminated exit signs where the line of sight is not clearly be visible at all times along designed emergency evacuation routes.

 Provide a directional arrow for the emergency exit sign that indicates the direction of travel to the emergency exit for the 1st floor.

9. Provide an illuminated exit sign for the 1st floor foyer emergency exit.

10. Either remove the designations of emergency exits from the emergency evacuation plan for the Adjutant and Deputy Adjutant Generals offices or provide illuminated exit signs for these doors and ensure the doors leading to these exits remain unlocked.

11. Provide an illuminated exit sign with directional arrows for the intended travel direction that can be read from both sides for the basement emergency exit.

12. Provide emergency exit hardware and remove the key lock for the north basement exit door.

13. Install a cover for the electrical junction box located near the ceiling of the 2nd floor storage room (Room 315).

 Install a cover for the electrical receptacle in the 1st floor reproduction room (Room 229).

15. Install a GFCI electrical receptacle for the electrical outlet in the first floor men's room (Room 226) sink.

 Provide permanent electrical wiring and a receptacle to replace the use of the extension cord in Room 249.

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.

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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, IHI'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. IHI assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of IHI, 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 IHI 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 IH Assistance Visit was reviewed and approved by:

MSPH, CIH, CSP

June 27, 2014 Date

gemor Sciencist

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **Non-Responsive** at 801-466-2223, or **Non-Responsive** of the Southwest Regional Industrial Hygiene Office at 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.

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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

American College of Occupational and Environmental Medicine (ACOEM), Position Statements/Guidelines, Evidence Based Statements, Adverse Human Health Effects Associated with Molds in the Indoor Environment, 2002. Available <u>www.acoem.org</u>.

American Conference of Industrial Hygienists, Bioaerosols: Assessment and Control, Macher, J, Ed., Cincinnati, Ohio, 1999.

American Industrial Hygiene Association, Recognition, Evaluation and Control of Indoor Mold. Prezant B, DM Weekes, JD Miller, eds. AIHA, Fairfax, VA. 2008.

New York City Department of Health, Bureau of Environmental & Occupational Disease Epidemiology. Guidelines on assessment and remediation of fungi in indoor environments. 2008. Rao, C, H Burge, J Chang. Review of quantitative standards and guidelines for fungi in indoor air. J. Air & Waste Manage. Assoc. 46:899-908, 1996.

USEPA, Office of Air and Radiation, Indoor Environments Division. Mold remediation in schools and commercial buildings. EPA 402-K-01-001, 2001.

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).

There are currently no legal standards governing specific permissible levels of mold spore exposures. We rely upon current scientific literature, guidelines and recommendations made by professional organizations and experts, and statistical methods in interpreting mold-sampling results.



Photograph 1 Building One, Front, Exterior



Photograph 2 Building One, Rear, Exterior



Photograph 3 General view - Basement



Photograph 4 General view – Basement, West office space



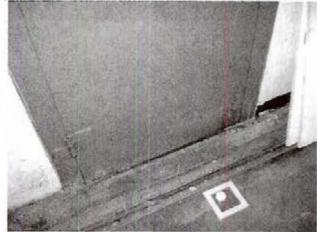
Photograph 5 General view – First floor hallway



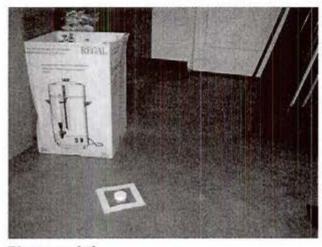
Photograph 6 General view – Second floor hallway



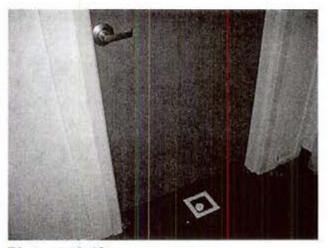
Photograph 7 Indoor Air Quality – Typical soiled return air grille



Photograph 8 Location of lead wipe sample 343-01



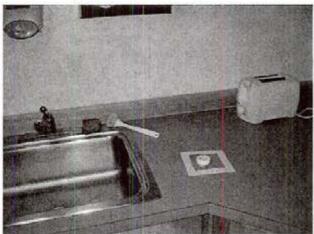
Photograph 9 Location of lead wipe sample 343-02



Photograph 10 Location of lead wipe sample 343-03



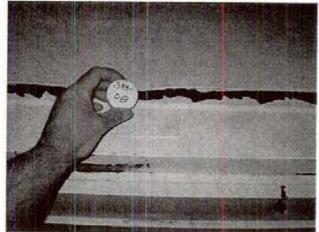
Photograph 11 Location of lead wipe sample 343-05



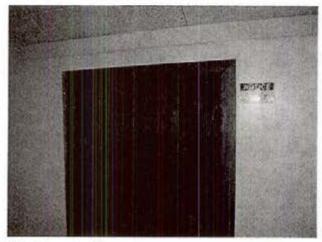
Photograph 12 Location of lead wipe sample 343-06



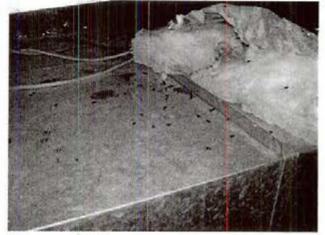
Photograph 13 Peeling paint located on storage room vault door



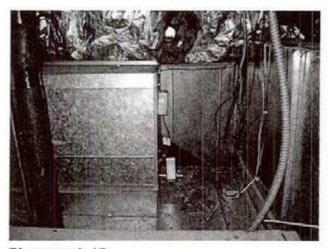
Photograph 14 Location of lead chip sample 343-08



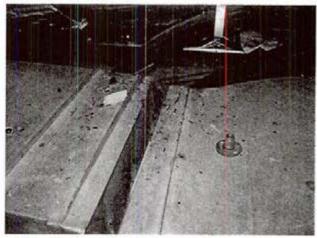
Photograph 15 Safety – Unlocked mechanical room door with confined space warning sign posted



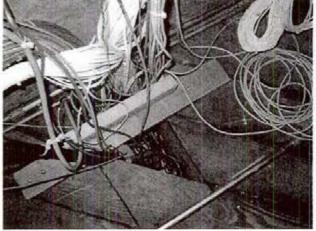
Photograph 16 Safety – Rodent droppings and nest on supply air duct in attic mechanical room



Photograph 17 Safety – Rodent droppings and nest on supply air duct in attic mechanical room



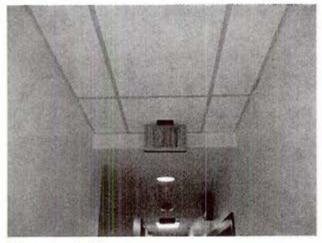
Photograph 18 Safety – Rodent droppings on supply air duct in attic mechanical room



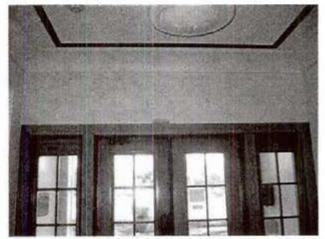
Photograph 19 Safety – Hole in walking surface in attic mechanical space



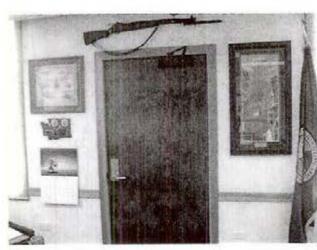
Photograph 20 Safety – Line of sight to emergency Exit sign impaired in basement



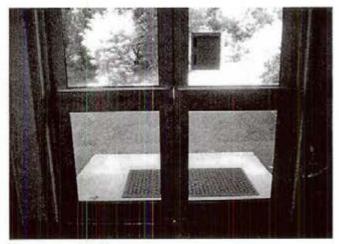
Photograph 21 Safety – Emergency Exit sign without directional arrow (Typical)



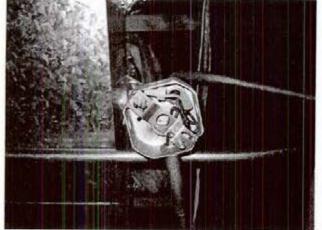
Photograph 22 Safety – Illuminated Exit sign missing from 1st floor foyer emergency exit



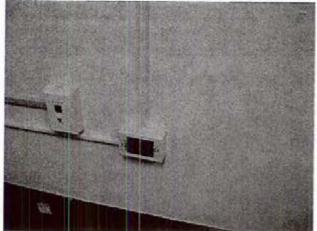
Photograph 23 Safety - Designated emergency exit in TAG office without Exit sign or appropriate exit door



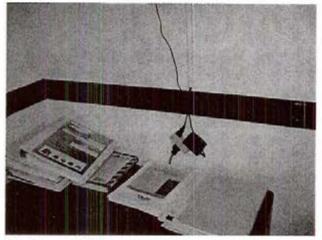
Photograph 24 Safety – Improper exit hardware and lockable exit door for basement emergency exit

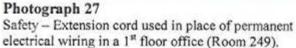


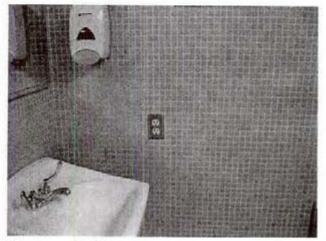
Photograph 25 Safety – Open electrical junction box on the 2nd floor storage room (Room 315).



Photograph 26 Safety – Open electrical receptacle in the 1st floor reproduction room (Room 229)



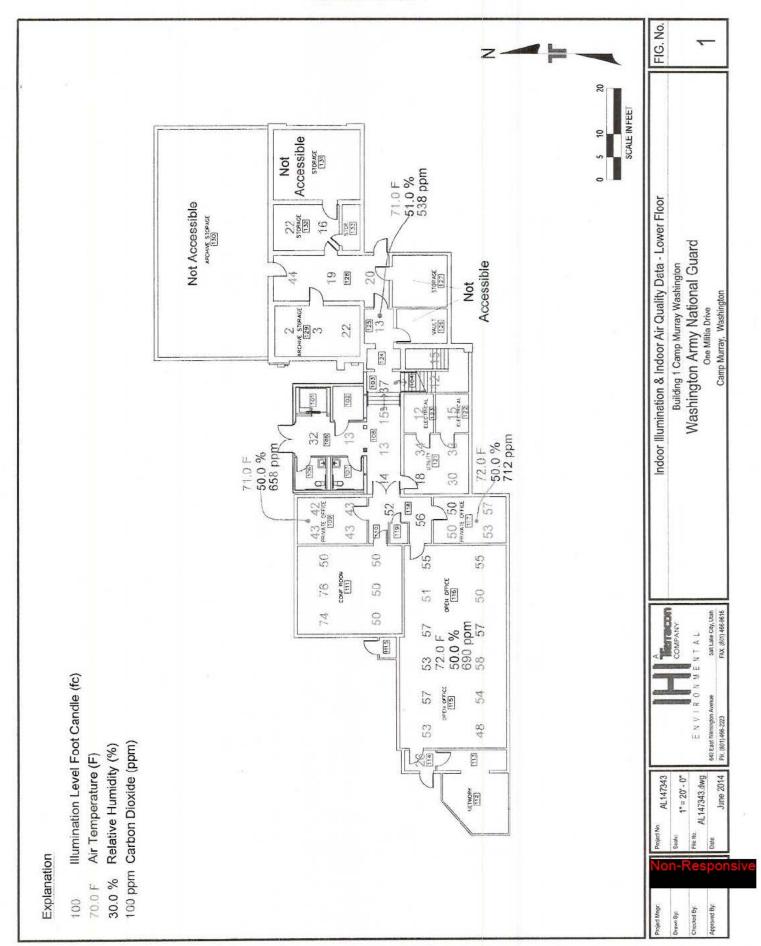




Photograph 28 Safety – GFCI missing from electrical receptacle in Men's room adjacent to sink

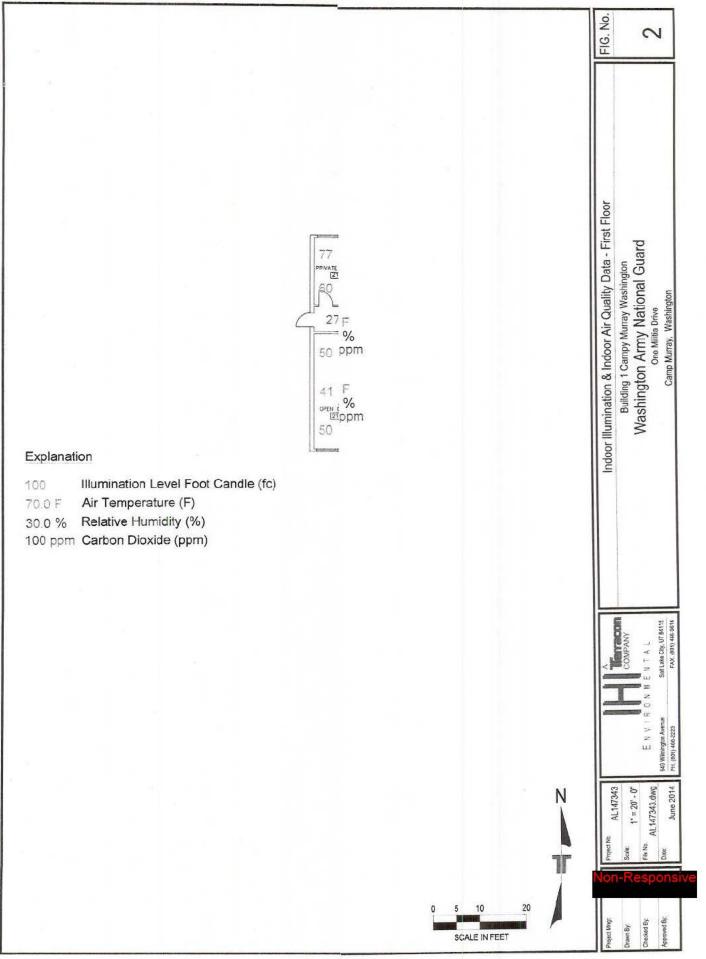


Photograph 29 HazMat – Janitorial supplies in janitor's closet



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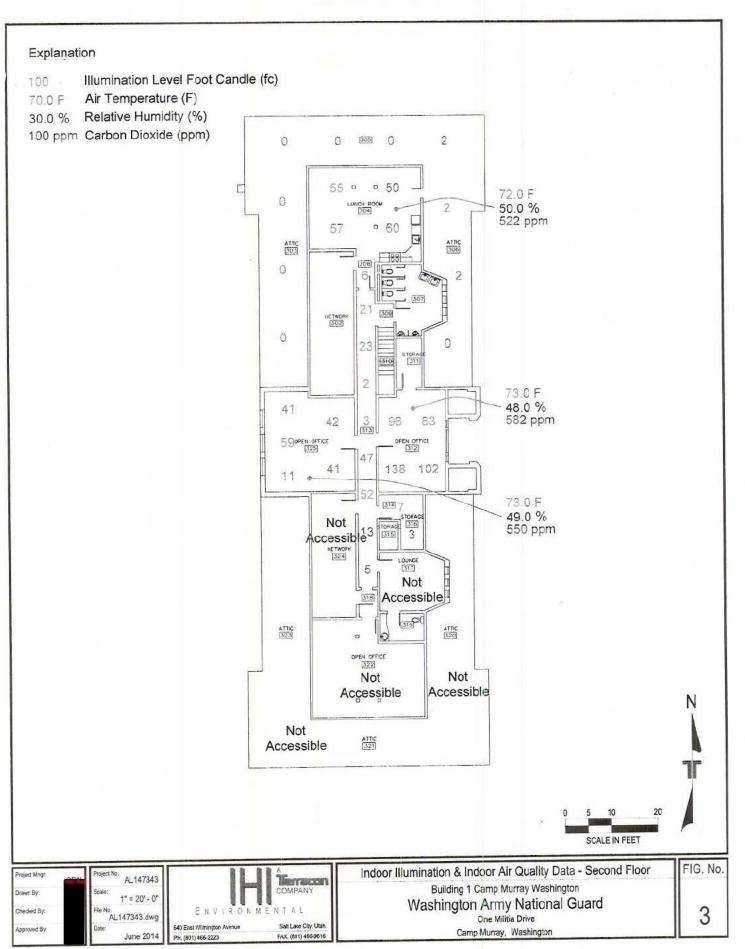
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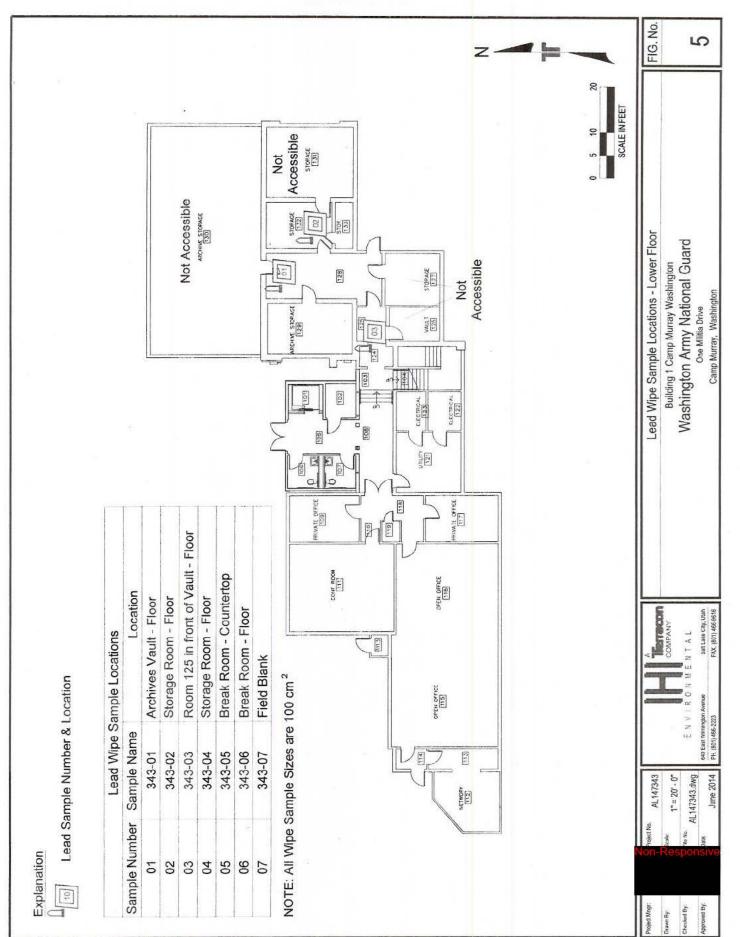
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Explanation

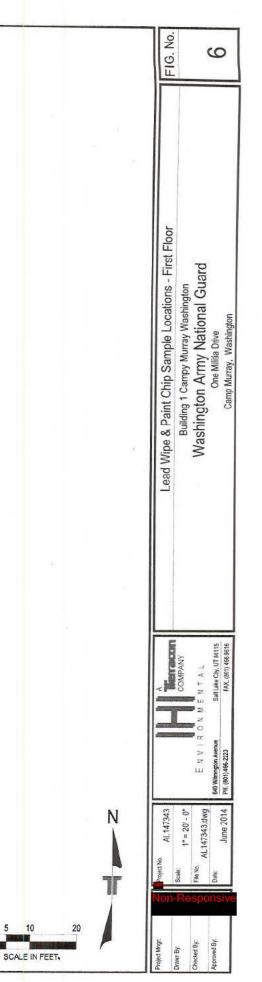
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Lead Sample Number & Location

| Lead Wipe Sample Locations | | | | | |
|----------------------------|-------------|---------------------|--|--|--|
| Sample Number | Sample Name | Loca | | | |
| 01 | 343-01 | Archives Vault - Fl | | | |
| 02 | 343-02 | Storage Room - FI | | | |
| 03 | 343-03 | Room 125 in front | | | |
| 04 | 343-04 | Storage Room - FI | | | |
| 05 | 343-05 | Break Room - Cou | | | |
| 06 | 343-06 | Break Room - Floc | | | |
| 07 | 343-07 | Field Blank | | | |

NOTE: All Wipe Sample Sizes are 100 cm²

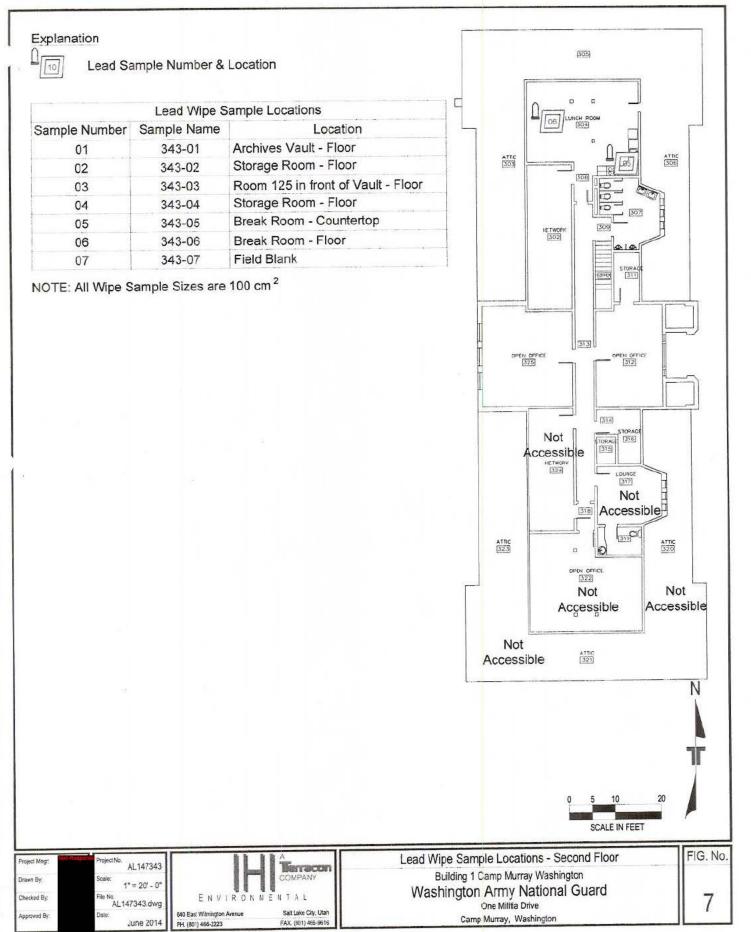
| Paint Chip Sample Locations | | | | |
|-----------------------------|-------------|------------------|--|--|
| Sample Number | Sample Name | Locatio | | |
| 08 | 343-08 | Vault Door Frame | | |



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ANALYTICAL REPORT

Von-Responsive

IHI Environmental 640 East Wilmington Avenue Salt Lake City, UT 84106 Report Date: June 13, 2014

Phone: (801) 466-2223 Fax: (801) 466-9616

Ion-Responsiveni-env.com

Workorder: 34-1415738 Client Project ID: AL147343/Bldg 1, Camp Murray, Purchase Order: AL147343 Project Manager: Paul Pope

| Analy | vtical | Results |
|-------|--------|---------|
| niu | rucui | results |

| Sample ID: 343-01 | | | | Collected: 06/02/2014 |
|-------------------------|-----------|------------------------------|----------------------------|--|
| Lab ID: 1415738001 | Sampli | Received: 06/06/2014 | | |
| Method: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 2.5 | 24 | 1.3 | |

| Sampli | ng Location: Blo | dg 1, Camp <mark>M</mark> urray, | Received: 06/06/2014 |
|-----------|------------------|--|--|
| | | | |
| Sampling | | | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| ug/sample | ug/ft² | RL (ug/sample) | |
| <1.3 | <12 | 1.3 | |
| | ug/sample | Sampling Parameter: An ug/sample ug/ft² | |

| Sample ID: <u>343-03</u> Lab ID: <u>1415738003</u> | Sampling Location: Bldg 1, Camp Murray, | | | Collected: 06/02/2014 Received: 06/06/2014 |
|---|---|--------|----------------|---|
| Method: NIOSH 7300 Mod. | | | ad Dust Wipe | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 5.3 | 49 | 1.3 | |

| Sample ID: 343-04 | | | | Collected: 06/02/2014 |
|-------------------------|-----------|------------------------------|----------------------------------|--|
| Lab ID: 1415738004 | Sampli | ng Location: Blo | dg 1, Camp <mark>M</mark> urray, | Received: 06/06/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 8.9 | 83 | 1.3 | |

ADDRESS 950 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

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ANALYTICAL REPORT

Workorder: 34-1415738 Client Project ID: AL147343/Bldg 1, Camp Murray, Purchase Order: AL147343 Project Manager: Non-Responsive

Analytical Results

| Sample ID: 343-05 | | | | Collected: 06/02/2014 |
|-------------------------|-----------|--------------------------------|----------------------------------|--|
| Lab ID: 1415738005 | Sampli | ng Location: Blo | dg 1, Camp <mark>M</mark> urray, | Received: 06/06/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Lea g Parameter: Are | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <12 | 1.3 | |
| | | | | |

| Sample ID: 343-06 | | | | Collected: 06/02/2014 |
|-------------------------|-----------|------------------------------|----------------------------|--|
| Lab ID: 1415738006 | Sampli | Received: 06/06/2014 | | |
| Method: NIOSH 7300 Mod. | Samplin | Media: Le g Parameter: Ar | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | and a second solution and and |
| Lead | <1.3 | <12 | 1.3 | |

| Sample ID: 343-07 | | | | Collected: 06/02/2014 |
|-------------------------|-----------|--------------------------------|----------------------------|--|
| Lab ID: 1415738007 | Sampli | Received: 06/06/201 | | |
| Method: NIOSH 7300 Mod. | Samplin | Media: Lea g Parameter: Are | ad Dust Wipe ea 100 cm² | Prepared: 06/10/2014 Analyzed: 06/10/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <12 | 1.3 | |

| Sample ID: 343-08 | | | Collected: 06/02/2014 |
|-------------------------|---------|--|-----------------------|
| Lab ID: 1415738008 | Sampl | Received: 06/06/201 | |
| Method: NIOSH 7300 Mod. | Samplin | Prepared: 06/11/2014 Analyzed: 06/11/2014 | |
| Analyte | % | RL (%) | |
| Lead | 0.0032 | 0.0012 | |

Report Authorization

| Method | Analyst | Peer Review |
|-----------------|----------------|----------------|
| NIOSH 7300 Mod. | Non-Responsive | Non-Responsive |
| 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: **34-1415738** Client Project ID: AL147343/Bldg 1, Camp Murray, Purchase Order: AL147343 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) | 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.deg.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: | | | |
| 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 |

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.

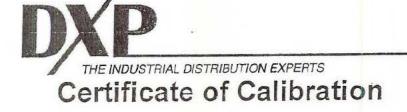
NA = Not Applicable.

** 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.

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The following equipment was calibrated to manufacturer's specification with instrumentation whose accuracies are traceable to the National Institute of Standards and Technology.

Manufacturer:

Extech Instruments

Model:

Serial Number:

Calibration Date:

Calibrated By:

407736 Sound Level Meter

110604630

August 14, 2013 Non-Responsive

1111 S. 27th St. Billings MT 59101 406-247-2050

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CERTIFICATE OF COMPLIANCE

| PRODUCT: | LIGHTMETER |
|------------|------------|
| MODEL #: | CA811 |
| CATALOG #: | 2121.20 |
| SERIAL #: | 1057FFCY |
| DATE: | 3/10/2014 |

Chauvin Arnoux, Inc./AEMC[®] Instruments certifies that this instrument meets or exceeds specifications as published by the company at the time of shipment. This instrument has been calibrated using standards and instruments traceable to the National Institute of Standards and Technology (NIST) or other certified laboratories.



Chauvin Arnoux[®], Inc d.b.a. AEMC[®] Instruments 15 Faraday Drive • Dover, NH 03820 USA Phone: (603) 749-6434 • Fax: (603) 742-2346 www.aemc.com



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| | ONDITION | | | Mod | EL. | | | 757 | 5-X |
|--|-----------------------|---------------|--------------------------------|-------------------------|------------------|------|------------------|---|------------------------------|
| TEMPERATURE RELATIVE HUMIDIT | Υ | 74.3 (23.5) | °F (°C) %RH | SERIA | L NUMBE | R | | 7575X13 | 306021 |
| BAROMETRIC PRES | SURE | 28.48 (964.4) | inHg (hPa) | N TOLERAN | 05 | | | | |
| As Left | | | | N TOLERAN OUT OF TOL | | | 100 | | |
| | - CAL | IBRATI | ON VER | IFIC | TION | RE | SULT | | |
| THERMO COUPL | E MEASURED | 41100 | SYST ABLE RANCE | | SURE01-C | | URED | | Unit: °F (°C) BLE RANGE |
| # STANDARD 1 71.6 (22.0) | 71.8 (22.1) | | .6 (20.9~23.1) | | | | | | |
| BAROMETRIC PI | RESSURE | | Syst | EM PRES | SURE01-0 | | 0 | and the second data was as a second data was as | t: inHg (hPa) |
| STANDARD 1 28.58 (967.8) | MEASURED 28.58 (967.8 | | OWABLE RANG 29.15 (948.5~98 | | STANDAR | D M | EASURED | ALLOW | ABLE RANGE |
| | Non-Res | Ponorto | | | م موال می در میک | Febr | uary 21, Date | 2014 | |
| | | | Doc 10: Cl | ERT_GEN_W | cc | | DATE | | |
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| CONTROL | | | | CODECTIVE ACTIONS | CHEDENCE | ACTION | Pethodad | 1111 | |
|-----------------|--|----------------------------------|-----|--|----------|-----------|----------|-----------|----------------|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abstement Plan) | DATE | OICINCOIC | Coef(e) | COBRECTED | REFERENCES |
| CLOSED | | | | fine another state | | | (chenn | | |
| WAB1-060214-4.1 | WAB1-060211-4.1 Analytical results for lead indicate the following sample locations were above the IHSW SOP's contamination criterion. 1. Basement floor in front of vault - Room 125, 49 µg/ft2. 2. First floor storage room floor - Room 230, 83 µg/ft2. | Building One | 4 | Clean the south basement floors and floor for the first floor storage room (room 230) in Building One to achieve a lead level less than 40 µg/ft2 following the guidance in the attached SOPs in Appendix M. Gain access to the two vaults on the east side of the basement and collect lead wipe samples to determine the floors of these vaults are the source of lead on the basement floor. | | | | | Lead |
| WAB1-060214-4.2 | wAB1-060214-4.2 The analytical result for the paint chip sample collected from the peeling paint on the door frame to the storage room vault door revealed the paint contained 0.0032 percent lead by weight. | 1st Floor Storage Room 230 | ▼ | Contact the State FMO, State Safety, and the State Environmental directorates before conducting any work that may disturb the integrity of the painted surfaces on the door frame for the storage room vauit door for Room 230. Construction personnel must follow the requirements of the OSHA Lead in Construction Standard, 29 CFR 1928.62, if they perform activities involving these painted surfaces that could create lead dust or fume. | | | | | 29 CFR 1926.62 |

Industrial Hygiene Southwest

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

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 205 of 980

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| May, 2018 |

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

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| NUMBER HAZARD DESCRIPTION cLoseb The general lighting is inadequate for tasks performed following areas: (Foom 129 Foom 280 Room 129 Room 129 Foom 332 Room 129 Room 129 Foom 332 Room 231 Room 231 Foom 303, 305, and 306 Room 200 Room 200 Room 303, 305, and 306 Attle and Mechanical Space Room 325 Southwest corner MAB1-0602144.6 There are return air grilles froughout the building have accumulations of dust on them. WAB1-0602144.6 There are return air grilles froughout the building have accumulation of safety training was not available for them. WAB1-0602144.6 There are return air grilles froughout the building have accumulation of safety training was not available for them. WAB1-0602144. Documentation of safety training was not available for them. MAB1-0602144. Documentation of safety training was not available for them. MAB1-0602144. Not employees. Here Building One employees. Here Building One employees. Here Posted as a non-permit | | | CONDICITINE ACTIONS | CHENEVICE | NOTION | Patiented | DATC. | |
|--|-----------------------|-----|---|-----------|-----------|-----------|-----------|--|
| The general lighting is inadequate for tasks performed following areas: • Room 129 • Room 129 • Room 230 • Room 230 • Room 241 • Hallway on 1st Floor between Room 202 and Rooms 225 and Room 202 and Rooms 225 and Room 202 and Rooms 225 and Attic and Mechanical Space • Room 303, 305, and 306 • Rooms 303, 305, and 306 • Rooms 314 and 316 • Hallway between Rooms 312 and 325 • Room 325 Southwest corner only There are return air grilles throughout the building have accumulations of dust on them. Documentation of safety training was not available for Building One employees. Euliding One employees. | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | DATE | OICINCOIC | Cost(s) | CORRECTED | REFERENCES |
| e is | d Building One | | Upgrade the illumination levels in the attic space on the north side of the second floor, Rooms 303, 305, and 306 to 5 foot-candles. Upgrade the illumination levels in Rooms 128, 129, 132, 230 to 30 foot-candles. Upgrade the illumination levels in the Hallway between Rooms 312 and 325, Rooms 314 and 316, Hallway on 1st Floor between Room 202 and Rooms 225 and 227 to 10 foot- candles. Upgrade the illumination levels in Rooms 241, 250, 265, and the Southwest corner only of Room 325 to 50 foot-candles. | | | | | Industrial Engineering Society (IES)/American National Standards Standards Institute (ANSI) RP7-1991 and 41 CFR 101-20-107, Energy Conservation Rule, Federal Property Management Regulations |
| | Indoor Air Quality | 6 | Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. | | | | | Recommended Practice |
| 1000 | Safety Training | 4 | At a minimum, provide emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building One. | | | | | 29 CFR 1910.38(e) & 29 CFR 1910.157(g)(1) & (g) (2) |
| | Safety | 6 | Provide a locking doorway for the mechanical room on the 2nd floor attic to restrict access to maintenance personnel only. | | | | | Recommended Practice & 29 CFR 1910.146 |

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Industrial Hygiene Southwest Violation Inventory Log

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

| DATE COBRECTED REFERENCES | Recommended Practice & 29 CFR 1910.141 (a)(5) 1910.141 (a)(5) | 29 CFR 1910.23(a)(9) | 29 CFR 1910.37(b)(4) | 29 CFR 1910.37(b)(4) |
|--|---|---|---|---|
| Estimated D Cost(s) COR | | | | |
| ACTION | | | | |
| SUSPENSE | | | | |
| CORRECTIVE ACTIONS (Abatement Plan) | Perform a visual survey Building One to determine where rodents are entering the building and block these holes to prevent rodent access. Hire a contractor with knowledge of Hantavirus remediation and decortamination to thoroughly clean the attc space mechanical room of rodent droppings, urine stains, and nests. Clean and decontaminate all supply and return air ducts in Building One for possible rodent droppings. Inspect and decontaminate as necessary the return air plenum in Building One for possible rodent infestation. | Provide a cover for the hole in the walking surface of the attic mechanical space that is used for telecommunication cable access | Perform a visual evaluation of Building One and add illuminated exit signs where the line of sight is not clearly be visible at all times along designed emergency evacuation routes. | Provide a directional arrow for the emergency exit sign that indicates the direction of travel to the emergency exit for the 1st |
| RAC | 8 | 4 | 4 | 4 |
| SITE | Safety | Safety | Safety | Safety |
| HAZARD DESCRIPTION | There is evidence of rodent infestation, rodent droppings, urne stains, and nests in the attic mechanical space. In addition, building occupants stated that rats and mice are periodically found above the celling tiles and can be heard in the suppiy air duct work for this building. | There is a hole in the walking surface of the attic mechanical space that is used for telecommunication cable access. | The line of sight for emergency exit signs and emergency exits is not apparent in all areas of Building One. | The 1st floor emergency exit sign in the hallway does not have a directional arrow point to the emergency exit for the |
| CONTROL | WAB1-060214- 4.9.2 | WAB1-060214- 4.9.3 | WAB1-060214- 4.9.4 | WAB1-060214- 4.9.5 |

Industrial Hygiene Southwest

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

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Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washington

| ABER | CLOSED UNAB1-060214- There is not an 4.9.6 sign for the main emergency exit. | WAB1-060214- There are 4.9.7 emergen evacuatic occupied Deputy A These an and exits individual office spa exit doors illuminate doors lea emergen | WAB1-060214- The illum 4.9.3 basemen approach the Wash employee west side | WAB1-060214- The morth 4.9.9 is not equi- emergenc has a lock locked, oc inside if th occupled normal wi | WAB1-060214- There is a 4.9.10 junction b |
|--|--|--|--|---|---|
| HAZARD DESCRIPTION | There is not an illuminated exit sign for the main foyer emergency exit. | There are two designated emergency exits on the posted occupant emergency evacuation plans for the offices occupied by the Adjutant and Deputy Adjutant Generals. These are private entrances and exits for the two individuals that occupy these exit doors are marked with indiminated exit signs and the doors leading to these emergency exits can be locked. | The illuminated exit for the basement emergency exit sign is only visible from the stairwell approach, but can be used by the Washington State employees who occupy the west side of the basement. | The north basement exit door is not equipped with emergency exit hardware and has a lock on the door, which if locked, could trap employees inside if the building is occupied before or after normal working hours, | There is an open electrical (unction box on the 2nd floor storage room (Room 315). |
| SITE | Safety | Safety | Safety | Safety | Safety |
| RAC | 4 | 4 | 4 | m | 4 |
| CORRECTIVE ACTIONS (Abatement Plan) | Provide an illuminated exit sign for the 1st floor foyer emergency exit. | Either remove the designations of emergency exits from the emergency evacuation plan for the Adjutant and Deputy Adjutant Generals offices or provide illuminated exit signs for these doors and ensure the doors leading to these exits remain unlocked. | Provide an illuminated exit sign with directional arrows for the intended travel direction that can be read from both sides for the basement emergency exit. | Provide emergency exit hardware and remove the key lock for the north basement exit door. | Install a cover for the electrical junction box located near the ceiling of the 2nd floor storage |
| SUSPENSE | | | | | |
| ACTION | | | | | |
| Estimated Cost(s) | (sheno | | | | |
| DATE | | | | | |
| REFERENCES | 29 CFR 1910.37(b)(2) | 29 CFR 1910.37(a)(3) & 29 CFR 1910.36(d)(1) | 29 CFR 1910.37(b)(4) | 29 CFR 1910.36 (d) (2) | 29 CFR 1910.305(b)(2)() |

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Reference DA FORM 4754 VER: 15 OCT 2009

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Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 1, Camp Murray, Washington

| CONTROL NUMBER CLOSED | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE | ACTION | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|-----------------------------|--|--------|-----|--|----------|--------|----------------------|-------------------|--------------------------------------|
| 31-060214- 4.9.11 | WAB1-060214- A cover is missing from the 4.9.11 electrical receptacle in the 1st floor reproduction room (Room | Safety | 4 | Install a cover for the electrical receptacle in the 1st floor reproduction room (Room 229). | | | | | 29 CFR 1910.305(j)(1)(i) |
| WAB1-060214- 4.9.12 | The first floor men's room (Room 226) has an electrical receptacte within six feet of a water source and is not protected by a ground fault circuit interrupter (GFCI). | Safety | m | Install a GFCI electrical receptacle for the electrical outlet in the first floor men's room (Room 226) sink. | | | | | NFPA 70, Article 210-8 |
| WAB1-060214- 4.9.13 | There is an extension cord used in place of permanent electrical wiring in a 1st floor office (Room 249). | Safety | 4 | Provide permanent electrical witing and a receptacle to replace the use of the extension cord in Room 249. | | | | | 29 CFR 1910.305 (g) (1) (iii) (A) |



Summary of Recommendations for WAARNG Building One

4.1 Metal Wipe Sampling

1. Clean the south basement floors and floor for the first floor storage room (room 230) in Building One to achieve a lead level less than 40 μ g/ft² following the guidance in the attached SOPs in Appendix M.

2. Gain access to the two vaults on the east side of the basement and collect lead wipe samples to determine the floors of these vaults are the source of lead on the basement floor.

4.2 Painted Surface Evaluation

Recommendations

1. Contact the State FMO, State Safety, and the State Environmental directorates before conducting any work that may disturb the integrity of the painted surfaces on the door frame for the storage room vault door for Room 230.

2. Construction personnel must follow the requirements of the OSHA Lead in Construction Standard, 29 CFR 1926.62, if they perform activities involving these painted surfaces that could create lead dust or fume.

4.4 Illumination

Recommendations

1. Upgrade the illumination levels in the attic space on the north side of the second floor, Rooms 303, 305, and 306 to 5 foot-candles.

2. Upgrade the illumination levels in Rooms 128, 129, 132, 230 to 30 foot-candles.

3. Upgrade the illumination levels in the Hallway between Rooms 312 and 325, Rooms 314 and 316, Hallway on 1st Floor between Room 202 and Rooms 225 and 227 to 10 foot-candles.

 Upgrade the illumination levels in Rooms 241, 250, 265, and the Southwest corner only of Room 325 to 50 foot-candles.

4.5 Indoor Air Quality

Recommendation

Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores.

4.8.2 Training Documents

Recommendation

At a minimum, provide emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building One.

1

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Summary of Recommendations for WAARNG Building One

4.9 General Safety Walk-Through

Recommendations

1. Provide a locking doorway for the mechanical room on the 2nd floor attic to restrict access to maintenance personnel only.

Perform a visual survey Building One to determine where rodents are entering the building and block these holes to prevent rodent access.

Hire a contractor with knowledge of Hantavirus remediation and decontamination to thoroughly clean the attic space mechanical room of rodent droppings, urine stains, and nests.

 Clean and decontaminate all supply and return air ducts in Building One for possible rodent droppings.

Inspect and decontaminate as necessary the return air plenum in Building One for possible rodent infestation.

Provide a cover for the hole in the walking surface of the attic mechanical space that is used for telecommunication cable access.

Perform a visual evaluation of Building One and add illuminated exit signs where the line of sight is not clearly be visible at all times along designed emergency evacuation routes.

8. Provide a directional arrow for the emergency exit sign that indicates the direction of travel to the emergency exit for the 1st floor.

9. Provide an illuminated exit sign for the 1st floor foyer emergency exit.

10. Either remove the designations of emergency exits from the emergency evacuation plan for the Adjutant and Deputy Adjutant Generals offices or provide illuminated exit signs for these doors and ensure the doors leading to these exits remain unlocked.

11. Provide an illuminated exit sign with directional arrows for the intended travel direction that can be read from both sides for the basement emergency exit.

12. Provide emergency exit hardware and remove the key lock for the north basement exit door.

13. Install a cover for the electrical junction box located near the ceiling of the 2nd floor storage room (Room 315).

 Install a cover for the electrical receptacle in the 1st floor reproduction room (Room 229).

15. Install a GFCI electrical receptacle for the electrical outlet in the first floor men's room (Room 226) sink.

16. Provide permanent electrical wiring and a receptacle to replace the use of the extension cord in Room 249.

2

There is not an industrial kitchen installed in Building One and therefore no sound pressure level measurements were obtained.

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Lead

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.
- Disposable overshoes or rubber boots. Personnel conducting cleaning operations should not take clothes, boots, etc., home for laundering.
- 7. HEPA vacuum
- 8. Six (6) mill plastic bags to dispose of waste.
- 9. Waste water containers.

Disposal of Waste Water and Cleaning Materials:

- 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 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:

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.

SOP FOR ARMORY CLEANUP

1. General.

1.1 Objective.

1.1.1. The purpose of this SOP (Standard Operating Procedure) is once a lead dust hazard has been identified and excess exists, how to lower the level of lead dust to afford a safe building, which is clean enough for all personnel exposed to this potential hazard.

1.2 Description of An Armory.

1.2.1 Armories provide a space for units to support and train soldiers.

1.2.2 The facility is utilized by Army National Guard (ARNG) family members, usually in a recreational or festive setting. This may include all members and all ages of a given family.

1.2.3 The Armory can be used for community activities, which may include all age levels.

1.3 Responsibilities.

1.3.1 It is the ARNG specialty branches, e.g., Industrial Hygiene (IH), Occupational Health & Safety's, responsibility to notify occupants of any known health risk within their facility.

1.3.2 It is the building managers responsibility to warn any users of this facility about potential hazards by, e.g., verbal, written or warning signs.

1.3.3 The ultimate responsibility falls back on the TAG of each state.

2. Background.

2.1 IH Investigation.

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 217 of 980 2.1.1 The IH community found unexpectedly high levels of lead dust during a normal IH investigation (survey) in an armory that had an Indoor Firing Range (IFR) within it. Wipe samples were taken in another armory without an IFR, only to find that this armory had higher than expected levels of lead dust, also.

2.1.2 Each ARNG Regional Industrial Hygienist has planned to survey all their armories spearheaded by the Midwest regional office, to determine the magnitude of these findings.

2.1.3 About 2/3rds of the armories tested so far, did not have "a clean bill of health". Now the IH community will attempt to discern where the contamination is coming from and also, give guidance on how to deal with these contaminant.

2.1.4 Air sampling of the armories tested have shown very low levels of lead dust in the breathing area. Dust wipe samples have varied in quantities present but have exceeded the EPA's floor standard and the ARNG IFR guidelines.

3. Relevant Standards and Guidelines.

3.1 Airborne Lead.

3.1.1 The Occupational Safety and Health Administrations (<u>OSHA</u>) Permissible Exposure Level (PEL) for <u>airborne lead</u> is **50 micrograms per cubic meter** (ug/m3), averaged over an 8-hour work shift. The OSHA action level is 30 ug/m3.

3.2 Blood Lead Level (BLL).

3.2.1 OSHA requires that personnel who are exposed to <u>airborne lead</u> above the PEL be offered medical surveillance that includes blood lead level monitoring. Personnel with total **BLL above 50** micrograms per deciliter (ug/dl) of blood are required to be removed from occupational lead exposures until the BLL drops back to 40.

3.2.2 Women who may become pregnant who are exposed to lead should consult with their physician. Fetal and newborn BLLs are similar to those of

the mother. The Center for Disease Control and Prevention considers levels above 10 ug/dl in children under 6 to be elevated BLLs.

3.3 Lead in Surface Dust.

3.3.1 There are no established standards for lead levels in dust within buildings other than those used by children under 6. The Environmental Protection Agency (EPA) along with Housing and Urban Development (HUD) floor dust lead level standard (which is currently 40 ug/ft2) does not apply to workplace surfaces, and would be impossible to maintain in many industrial facilities. (EPA 40 CFR Part 745)

3.3.1.1 The EPA interior windowsill standard is 250 ug/ft2.

3.3.1.2 The EPA standard for window trough is 400 ug/ft2.

3.3.2 OSHA cites a level of 200 ug/ft2 as guidance to its own inspectors for evaluating the cleanliness of lunchroom and locker room surfaces that are supposed to be kept as clean as possible.

3.4 Lead in Paint.

3.4.1 EPA's standard for lead-based paint or other surface coatings that contain lead equal to or exceeding 1.0 milligram per square centimeter (mg/cm2) or 0.5 percent (%) by weight or 5000 parts per million (ppm) by weight.

4. Indoor Firing Ranges (IFR).

4.1 Relevant Standards and Guidelines.

4.1.1 OSHA guidelines stated above (see 3.3.2) are the recommended working levels to achieve in an active IFR.

4.1.2 NGR 385-10 guideline reflects that of OSHA at 200 ug/ft2 for lead dust on surfaces.

4.2 Maintenance and Cleaning.

4.2.1 Follow NGR 385-10, along with SOP found in All States Letter (Log Number P00-0059 along with All States Letter (Log Number P01-0075)

3.0 METHODS

3.1 Metal Wipe Sampling

Metal wipe samples were collected on horizontal surfaces to evaluate housekeeping standards. Lead Wipe[™] brand wipes were used with a 100-square-centimeter template. The wipes conform to American Standards for Testing and Materials 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 Laboratories for analysis, using National Institute for Occupational Safety and Health (NIOSH) Method 7300. See Appendix G for sample locations and Appendix H for laboratory results.

The Mather, California, office of Industrial Hygiene Southwest has developed a Standard Operating Procedure (SOP) for lead that sets forth a criterion of 40 micrograms of lead per square foot (μ g/ft²) for break rooms, floor surfaces, or any area that might be used for non-military functions. Additionally, a 200- μ g/ft² 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.

3.2 Painted Surface Evaluation

The building interior surfaces were visually inspected for peeling or damaged paint on the building materials. All painted surfaces should be treated as lead-containing materials until determined otherwise. Contact the State FMO, State Safety, and the State Environmental Directorates before conducting any work that may disturb the integrity of painted surfaces.

3.3 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

The interior of the facility was visually inspected for signs of moisture intrusion that could result in fungal growth. Any signs of moisture intrusion (e.g., discoloration, staining, blistering) were noted and documented on a drawing for a follow-up evaluation.

3.4 Illumination Level Monitoring

Illumination measurements were taken in all accessible areas of Building 1 using an AEMC Instruments Light Meter, Model CA811. Measurements in the office areas were taken at typical work locations, such as the tops of desks and near workstations. To provide

IH Assistance Visit WAARNG - Building 1 2

IHI Environmental Project No. AL147343



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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

Industrial Hygiene Site Assistance Visit

Civil Support Team (CST) Bldgs. 5E, 6 & 6A

Camp Murray Tacoma, WA 98430

27 May 2014

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

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ARNG-CSG-P

28 JUL 2014

MEMORANDUM THRU NOn-Responsive OHN, Bldg. 6224, 2n Division Dr, JBLM, WA 98433

FOR Commander, Civil Support Team (CST) Bldgs. 5E, 6 & 6A Camp Murray, Tacoma, WA 98430

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Civil Support Team (CST) Bldgs. 5E, 6 & 6A Camp Murray, Tacoma, WA on 27 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 Civil Support Team (CST) Bldgs. 5E, 6 & 6A Camp Murray, Tacoma, WA on 27 MAY 2014.

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

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

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correspond to the sections where they were first noted. (i.e., paragraph 2.1a represents the 2.1a located within the contractors report.

a. Continue quality <u>housekeeping practices</u> in order to help <u>prevent migration</u> of heavy metals throughout the facility, avoid dry sweeping and do clean horizontal surfaces regularly. (Exec. Summary) (RAC 4)

b. Conduct a facility survey to identify and assess extent of <u>asbestos hazards</u> and implement an asbestos Hazard Management Plan. (para. 5.3) (RAC 3)

c. Adjust temperature throughout building 6 to meet the ASHRAE standard recommended range. (para. 4.2) (RAC 3)

 d. Develop and maintain a <u>chemical inventory list</u>, <u>Safety Data Sheets</u> (<u>SDS</u>) & a <u>written</u> <u>Hazard Communication</u> program, with an annual or as needed personnel training. (para 7.1 & 6.2) (RAC 4)

e. Once a plumbed or temporary portable <u>Emergency Eyewash/shower</u> is installed, in building 6A, then this system should be tested weekly and documented on the safety tag that the functional tests were performed. (para. 7. 1) (RAC 3)

f. In <u>outdoor storage</u> where flammable materials are stored should be in adequate ventilation storage, e.g., with louvered doors, to provide passive air exchanges. (para. 7.1) (RAC 4)

g. Have the <u>annual and monthly fire extinguisher inspections</u> conducted and extinguisher tags are properly annotated. (para. 7.4.3) (RAC 3)

h. Develop and maintain a written <u>Emergency Preparedness Program</u> and perform training and maintain records, on site. (para. 6.1) (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:

(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.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Civil Support Team (CST) Bldgs. 5E, 6 & 6A Camp Murray, Tacoma, WA on 27 MAY 2014

(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).

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 IHSAV.

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>Washington</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.

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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 NGB-IHSW office at (916) 854-1491 or via spons on-R email at

NGB, IHSW, CIV Regional Industrial Hygiene Manager

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| * OHAND |

Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS 10th Civil Support Team (CST) - Camp Murray, Washington

| | | | BEST AVAILABLE COPY | | | | |
|---|--|--|---|---|--|--|--|
| WACST- 05272014-7.1 | WACST- 05272014-7.1 | WACST- 05272014-6.1 & 6.2 | WACST- 05272014-6.1 | WACST- 05272014-5.3 | WACST- 05272014-4.6 | WACST- 05272014-4.2 | |
| Chemical inventory for the outdoor storage sheds was not available. | Chemical storage sheds did not have ventilation | No Hazard Communication Program was available. | No Emergency Preparedness Program was available; training was not conducted. | Asbestos Buliding Materials: inspection, re-inspection, and Asbestos Hazard Management Plan | Past due annual certification of Type 2A biological Safety Cabinet | Temperature was below the ASHRAE recommended ranges. | HAZARD DESCRIPTION |
| Outdoor Storage Sheds | Outdoor Storage Sheds | Facility | Facility | Building 6, 6A & 5E | Building 6A | Building 6A | SITE |
| 4 | 4 | 4 | 4 | ω | 4 | ω | RAC |
| Inventory chemicals on-site and update the binder to reflect current inventory. | Relocate the flammable materials to an adequately ventilated storage area. | Develop and maintain a written Hazard Communications Program onsite. Perform training and maintain records. | Develop and maintain a written Emergency Preparedness Program onsite. Perform training and maintain records. | Conduct a facility survey to ID & assess extent of asbestos hazards; & implement an Asbestos Hazard Management Plan | Ensure the biological safety cabinet is tested and certified on an annually basis. | Adjust temperature throughout Building 6 to meet the ASHRAE recommended range. | CORRECTIVE ACTIONS (Abatement Plan) |
| | | | | | | | DATE |
| | | | | | - | | ACTION |
| | | | | | | | Estimated Cost(s) |
| | | | | | | | CORRECTED |
| 29 CFR 1910.1200(e)(i) | 29 CFR 1910.106 (d)(4)(iv) | 29 CFR 1910.1200(e) | 29 CFR 1910.38(c) & (e) | AR 420-1, 5-24b, c, & d | ANSI 49-2008, 6.16 | ASHRAE Standard 62.1- 2010 | REFERENCES |

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LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Industrial Hygiene Southwest Violation Inventory Log

10th Civil Support Team (CST) - Camp Murray, Washington

| BEST | AVAILABLE COP | Y | | |
|--|---|--|---|--|
| WACST- 05272014-7.4.5 | WACST- 05272014-7.4.3 | WACST- 05272014-7.4.1 | WACST- 05272014-7.1 | |
| Extension cord was used as permanent wiring. | Fire extinguishers were expired for monthly inspections and annual certifications | Electrical panels were obstructed by stored materials. | No emergency eyewash station was present in the chemical storage/use area. | HAZARD DESCRIPTION |
| Survey Leader's Office | Facility | Buildings 6 and 6A | Building 6A | SITE |
| 4 | ω | 4 | ω | RAC |
| Relocate items to avoid using an extension cord or install outlet closer avoid using | Perform and document monthly inspections and annual certifications for fire extinguishers. | Relocate materials to allow unobstructed access to electrical panels | Provide an emergency eyewash station within ten (10) seconds travel from chemical storage/use areas. | CORRECTIVE ACTIONS (Abatement Plan) |
| | | | | SUSPENSE DATE |
| | | | | ACTION OIC/NCOIC |
| | | | | Estimated Cost(s) |
| | | | | DATE |
| 29 CFR 1910.305(g)(iv)(A) | 29 CFR 1910.157(e)(1), 29 CFR 1910.157(e)(3) | 29 CFR 1910.303 (g)(1)(ii) | ANSI Z358.1- 2009, 29 CFR 1910.151(c) | REFERENCES |

extension cords.

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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: <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.

<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. <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.

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EXECUTIVE SUMMARY

On May 27, 2014, **NON-RESPONSIVE** Industrial Hygiene Specialists with Network Environmental Systems, Inc. (*NES*), conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the 10th Civil Support Team (CST) located in Buildings 6 and 6A at Camp Murray in Tacoma, Washington. The facility commander was Non-Responsive Non-Responsive who may be reached by phone at (253) 512-8145 or by email at Non-Responsive served as the point of contact

(POC) for information gathered during the IHSAV.

The objectives of this IHSAV were to:

- Evaluate work processes conducted within the facility;
- · Review hazardous material storage and use procedures;
- · Collect area and breathing zone air samples;
- · Collect metal surface wipe samples;
- Measure the volumetric flow of exhaust ventilation systems;
- Assess potentially noise hazardous areas;
- Measure illumination levels;
- Collect indoor air quality (IAQ) data;
- Evaluate existing safety hazards;
- Inspect and evaluate the paint booth operation and systems (if present);
- Evaluate the facility for potential asbestos, lead, and mold hazards;
- · Review safety policies/programs, training, and record keeping; and
- Conduct Hazard Assessments (HA's).

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest (IHSW) – 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 methodologies, regulatory requirements, and recommendations. Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables NON-Responsive were cooperative with questions asked and provided assistance obtaining information during this IHSAV. The details within this report are a direct result of the assistance provided by Non-Responsive and Non-Responsive

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1.0 INTRODUCTION

On May 27, 2014, **Non-Responsive**, Industrial Hygiene Specialists with *NES*, conducted an IHSAV at the 10^{ee} CST located in Buildings 6 and 6A at Camp Murray in Tacoma, Washington. The primary POC for information gathered during this survey was **Non-Responsive** he facility commander, may be reached by

phone at (253) 512-8145 or by email at Non-Responsive

1.1 Objectives

The primary objective of the IHSAV was to evaluate the occupational environment of the areas within the 10th CST facility in order to determine the presence of health and safety risks. 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. This IHSAV will serve to establish a baseline Hazard Assessment (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;
- · Review hazardous material storage and use procedures;
- Collect area and breathing zone air samples;
- Collect metal surface wipe samples;
- Measure the volumetric flow of exhaust ventilation systems;
- · Assess potentially noise hazardous areas;
- Measure illumination levels;
- Collect indoor air quality (IAQ) data;
- Evaluate existing safety hazards;
- Inspect and evaluate the paint booth operation and systems (if present);
- Evaluate the facility for potential asbestos, lead, and mold hazards;
- · Review safety policies/programs, training, and record keeping; and
- Conduct Hazard Assessments (HA's).

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2.0 PROCESS DESCRIPTION

The 10th CST facility was composed of two (2) separate buildings (6 and 6A). Building 6 contained administrative offices, a classroom used for training, a break room, various storage rooms, locker rooms, and a medical examination area. Building 6A, located west of Building 6, was primarily used for hazmat response vehicle parking and equipment storage. General administrative duties were conducted in the offices for the Washington Army National Guard.

Personnel reported that Building 5E would be occupied and utilized by the unit in the future; transition and use of the facility had begun as of the IHSAV. Thus, only limited assessment of Building 5E was conducted during this IHSAV.

The facility was located along Field Artillery Trail in Camp Murray. Buildings 5 and 5A bordered the facility to the north. An open lot bordered the facility to the east, and wooded areas bordered to the south and west.

Building 6 was reportedly constructed in 2004 and the 10th CST occupied the building in 2005. The total size of the facility was unknown at the time of the IHSAV. The facility operated Monday thru Friday from 0900 to 1700. The primary unit assigned to the facility was the 10th CST, whose primary work activities included administrative support, training, and emergency hazardous materials (HAZMAT) response. There were a total of 22 full time guard members assigned to the facility. A copy of the employee list is provided in Appendix K.

Site personnel reported that a previous IHSAV had been conducted in 2011, but no documentation was available.

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3.0 METHODS

NES assessed multiple conditions and operations using quantitative means. The methods used to conduct these assessments are detailed in this section. Results of these assessments are detailed in Section 4.0.

3.1 Personal Breathing Zone Air Sampling

NES did not conduct personal breathing zone air sampling during this IHSAV as no work processes were performed where NES could conduct such sampling.

3.2 Indoor Air Quality

Carbon dioxide (CO₂) 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 during respiration. 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. 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).

Temperature is commonly measured during IAQ assessments to determine comfort of occupants. Indoor temperatures are recommended to range 68-74° Fahrenheit (F) during the winter and 72.5-80 °F in the summer. Relative humidity indicates the amount of moisture in the air. Typically, interior humidity levels above 65-70% can be conducive to fungal conditions.

Carbon dioxide, temperature, and relative humidity were measured using a Gray Wolf IAQ Meter, model IQ-410. A copy of the current annual calibration certificate for this instrument is located in Appendix H.

3.3 Air Monitoring – Carbon Monoxide

Carbon monoxide is a colorless, odorless, poisonous gas. It is produced by the incomplete burning of solid, liquid, and gaseous fuels. Appliances fueled with natural gas, liquefied petroleum (LP gas), oil, kerosene, coal, or wood may produce CO. Through the use of ventilation, it is uncommon to find elevated concentrations of CO indoors. The health effects of CO depend on the concentration of CO and length of exposure, as well as each

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 237 of 980 individual's health condition. The concentration of CO is measured in ppm. Health effects from exposure to CO levels of approximately 1 to 70 ppm are uncertain, but most people will not experience any symptoms. Air monitoring for carbon monoxide (CO) was performed throughout the facility using a Gray Wolf IAQ Meter, model IQ-410. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.4 Metal Wipe Sampling

Lead dust may be introduced into a facility from work processes, facility finishes, consumer products, or other sources. Lead wipe samples were collected from horizontal work and floor surfaces in various locations throughout the facility to evaluate the potential presence of leadcontaminated dust. Ghost Wipe[™] 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 (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.

3.5 Painted Surface Evaluation

Based on the age of most National Guard facilities, it is possible that lead paint could be present on walls and other surfaces. If kept intact, the potential hazard of lead paint is minor. Paint that is peeling or otherwise degraded could potentially result in lead-contaminated dust and increases the risk of exposure. Thus, an identification and assessment of deteriorating paint was conducted as part of this IHSAV.

Painted surfaces throughout the CST were in good and intact condition. Peeling paint was not identified at the CST facility and thus no bulk samples were collected.

3.6 Exhaust Ventilation Survey

Exhaust ventilation systems were assessed to determine their functionality and ability to sufficiently exhaust air and contaminants from the areas they operate within. Ventilation measurements were collected from the biological safety cabinet located in Building 6A. No other exhaust ventilation systems were present at the site. *NES* collected air velocity and flow measurements using a TSI VelociCalc, model 8385A. A copy of the annual calibration certificate for this instrument is located in Appendix H.

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3.7 Personal Noise Dosimetry and Sound-Level Measurements

Personal noise dosimetry and sound-level measurements were not collected during this IHSAV as no hazardous noise sources were identified.

3.8 Illumination Level Monitoring

Illumination measurements were taken throughout the facility using an Extech Light Meter, model 407026. 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.

3.9 Equipment Used

The following equipment was used for this survey:

| Equipment Type | Model Number | Serial Number | Calibration Date |
|----------------------------------|-----------------|---------------|---------------------|
| Gray Wolf IAQ Meter | IQ-410 | 01-936 | 01/2014 |
| Extech Light Meter | 407026 | Q105859 | 10/2013 |
| TSI VelociCalc [™] Plus | 8385A | 02110331 | 07/2013 |

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

3.10 Quality Assurance

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

- Using appropriately educated & experienced staff who receive continuing education;
- Documentation of pertinent field and sampling information;
- Peer review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to documented method requirements, in particular to NIOSH & OSHA methods, & 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;

 Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

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4.0 SAMPLING RESULTS

4.1 Personal Breathing Zone Air Sampling

NES did not conduct personal breathing zone air sampling during this IHSAV as no work processes were performed where NES could conduct such sampling.

4.2 Indoor Air Quality

The facility has methods and engineering controls in place to provide adequate IAQ. The average outdoor CO_2 concentration was measured to be 475 ppm; therefore, the maximum indoor CO_2 concentration recommended by ASHRAE was 1,175 ppm. The CO_2 concentrations from inside Building 6 ranged between 501 and 559 ppm while CO_2 concentrations from inside Building 6A ranged between 491 and 731 ppm. The ASHRAE recommended CO_2 concentration was not exceeded in either building.

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 Building 6 ranged between 65.5 and 68.3°F while temperatures inside Building 6A ranged between 68.1 and 68.9°F. Relative humidity in Building 6 ranged from 43.6 to 46.8% while in Building 6A it ranged from 44.1 to 47.5%. Nine (9) of the 13 locations measured within Building 6 were below the ASHRAE recommended range for temperature. The temperatures within Building 6A were within the ASHRAE recommended temperature range. All of the locations measured in both Buildings 6 and 6A were within the ASHRAE recommended range for relative humidity.

A table of the sample locations and corresponding IAQ measurements is available in Appendix E of this report.

4.3 Air Monitoring – Carbon Monoxide

Carbon monoxide concentrations were measured at a total of 13 locations in Building 6 and four (4) locations in Building 6A using a Gray Wolf IAQ Meter, model IQ-410. The concentrations of CO inside Building 6 ranged from 1.2 to 1.4 ppm while concentrations in Building 6A ranged from 5.2 to 6.8 ppm; close to outdoor background concentrations. These concentrations are also below the exposure limit ceiling of 200 ppm set forth by OSHA. The concentrations in Building 6A were found to be slightly higher than those measured in Building 6. This is believed to be a result of vehicles driving in, out, and parking within Building 6A. A summary of CO measurements collected is provided in Appendix E.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 241 of 980 Lighting measurements were collected in a total of 13 locations in Building 6 and 4 locations in Building 6A. Based on the above criteria, lighting was sufficient in each of the locations measured. See Appendix E for a table of illumination measurements.

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6.0 TRAINING DOCUMENTS AND HAZARD ASSESSMENTS

6.1 Written Programs & SOPs

The following written programs and procedures were maintained at the 10th CST facility with dates of the latest revisions in parenthesis:

- Incremental Analytical Laboratory System (5/2013)
- Radiation Safety SOP (4/2013)
- Respiratory Protection Program (4/2014)

The facility did not have a copy of the Building Manager Handbook which contains the Emergency Preparedness and Hazard Communication (HAZCOM) programs. Medical surveillance physicals were reportedly completed annually.

Note: *NES* evaluated the written programs / procedure documents to verify their presence and implementation. *NES* did not evaluate the contents or quality of any of the documents identified during this visit.

6.2 Training Documentation

The following training documentation was found at the site with dates of the most recent training provided in parenthesis:

- Confined Space (12/2013)
- HAZMAT Technician Training (1/2014)
 - Bloodborne Pathogens
 - Chemical Response and Handling
 - Hazard Communication
 - Personal Protective Equipment (PPE)
 - Respiratory Protection
- Radiation Safety (online)

Training documentation consisted of sign-up sheets for personnel attending and a summary of the topic covered. Medical surveillance physicals were performed annually.

Note: *NES* evaluated the training documents to verify whether training has been provided. *NES* did not evaluate the contents or quality of any of the training.

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6.3 Hazard Assessments

Hazard assessments were performed on job tasks to evaluate what health and safety hazards may be present or potentially present. Hazard assessments were written based on a combination of observing the job task, interviewing the employee performing the task, and when possible, personnel exposure monitoring. Hazard assessments help identify harmful or potentially harmful health and safety hazards and guide in determining what forms of personal protective equipment (PPE) may be needed to protect against identified hazards and are used as supplemental training tools. The hazard assessment developed during this IHSAV is summarized below. Additionally, a copy of the completed hazard assessment is provided in Appendix M.

6.3.1 Mobile Analytical Laboratory Suite

CST's mission is to provide support to civil authorities at domestic chemical, biological, radiological, nuclear, and explosive (CBRNE) incidents. The mobile analytical laboratory suite is a vehicle, equipped with a two-person cab and analytical laboratory, used by CST personnel during HAZMAT response events to identify and assess CBRNE agents / substances. The laboratory is separate from the vehicle cab, located in the rear of the vehicle, and is equipped with a myriad of analytical systems designed to identify and characterize chemical and biological agents. Some of the analytical equipment includes: microscopes, gas chromatograph, hydrogen generator, negative pressure glove box, and 5-gas meter.

Upon mobilization to the site, the vehicle is parked outside of the site-specific hot zone in order to reduce risk of contamination. Field samples, which are collected and double sealed by other CST field personnel, are decontaminated prior to being handed over to the mobile analytical team. Once received, the samples are placed into the glove box, the glove box is sealed, and then the samples are processed in the sealed glove box in adherence with established procedures. Personnel reported that limited PPE is utilized during response analytical activities due to the processes being enclosed (see PPE section below).

A 5-gas meter is used during on-site analytical operations to measure ambient conditions within the lab in order to detect gas leaks from analytical equipment. The calibration and maintenance program of the 5-gas meter was not obtained during the IHSAV.

The analytical laboratory suite is serviced and maintained at the CST facility on Camp Murray for an average of one (1) hour per day in order to maintain equipment and field supplies in a response-ready state.

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6.4 Work Processes Not Observed

Additional work processes are performed by personnel at this facility, but were not observed during the IHSAV. These work processes include the following: administrative duties, field communications, field evaluation and sampling, and various emergency preparations.

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7.0 OBSERVATIONS AND QUALITATIVE ASSESSMENT

NES assessed multiple conditions and operations using qualitative means and observations. Our methods and findings of qualitative assessments made are detailed in this section.

7.1 Hazardous Materials Inventory, Storage & Material Safety Data Sheets

A review of the facility's chemical inventory and safety data sheet (SDS) file was conducted. The SDS binder was dated May 2013. Hazardous materials were stored inside a flammable materials storage locker and the stored chemicals were observed to be properly segregated.

Two clamshell storage containers designed to store petroleum, oil, and lubricants (POLs) were observed behind Building 6A. Materials in the containers included POLs and ammonium sulfate. The containers were not equipped with ventilation systems or passive vents. The stored materials did not have an associated inventory and ownership was initially unknown to the POC. It was later determined that the POLs belonged to State Maintenance. Eyewash stations were not available in the chemical handling and storage areas.

7.2 General Supply Areas

General supply areas throughout the facilities were well organized and in good visible condition. Mobile response vehicles and field equipment were stored within Buildings 6A and 5E. These areas were maintained and regularly cleaned.

7.3 Contract (Non-DoD) Operations

Contract (non-DoD) operations are performed at this facility and include: State of Washington Maintenance (HVAC) and contractors (hood certifications).

7.4 Safety Walk-Through

NES conducted a walk-through of the facility to identify existing conditions and whether safety hazards or regulatory deficiencies were present. Some of the conditions observed were documented in photographs, attached in Appendix C (Photo Log).

- 1. The electrical panels in Buildings 6 and 6A were obstructed by stored materials.
- 2. A workplace ergonomics evaluation has not been performed or documented.
- 3. Fire extinguishers were past due for monthly inspections and annual certifications.
- The fire extinguisher in the classroom was rusted on the bottom; verify that it is in a functional / useable condition.
- 5. An extension cord was used for non-temporary purposes in the survey leader's office.

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- Rusty metal drums were located at the south side of Building 6A. These drums were reportedly used for training purposes, but were not labeled as empty or for their intended purpose(s).
- A pair of loose wires was observed on the western wall of Building 6A. It was reported that the wires were dead, but it was not confirmed.

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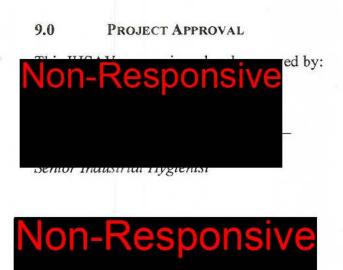
8.0 PROJECT LIMITATIONS

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.

NES, Inc. NES Job Number: 013.1H1716.27



| Date | | |
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Technical Assistance: For technical assistance regarding information found in this report or the performed survey; please contact *NES* at 916-353-2360 or **Non-Responsive** of the Southwest Regional Industrial Hygiene Office, 916-854-1491. 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.

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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 10th CST Camp Murray, WA May 27, 2014



Photo 1: 10th CST Building 6 exterior, view to the south.



Photo 2: Building 6A used for response vehicle parking and equipment storage.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 252 of 980

PHOTO LOG 10th CST Camp Murray, WA May 27, 2014



Photo 3: Building 5E used for additional response vehicle parking and equipment storage.



Photo 4: Type 2A biological safety cabinet, located at the west end of Building 6A.

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PHOTO LOG 10th CST Camp Murray, WA May 27, 2014



Photo 5: Lead wipe sample 052714-CST-W-01 collected from Building 5E floor near the survey area.

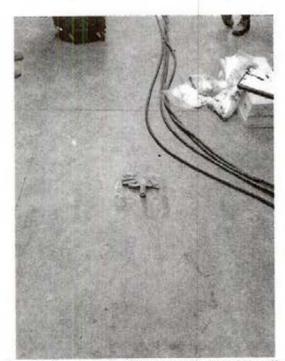


Photo 6: Lead wipe sample 052714-CST-W-02 collected from Building 6A floor at the west end.

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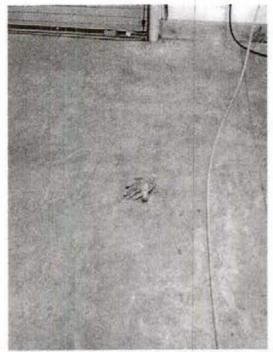


Photo 7: Lead wipe sample 052714-CST-W-03 collected from Building 6A floor in the center of the work bays.



Photo 8: Lead wipe sample 052714-CST-W-04 collected from Building 6A floor at the east end.

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PHOTO LOG 10th CST Camp Murray, WA May 27, 2014



Photo 9: Lead wipe sample 052714-CST-W-05 collected from Building 6A vault floor.

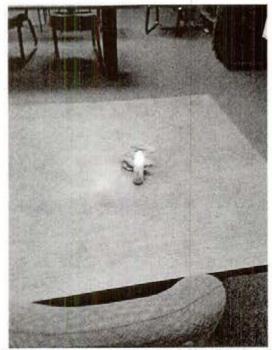


Photo 10: Lead wipe sample 052714-CST-W-06 collected from Building 6 classroom tabletop.

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PHOTO LOG 10th CST Camp Murray, WA May 27, 2014

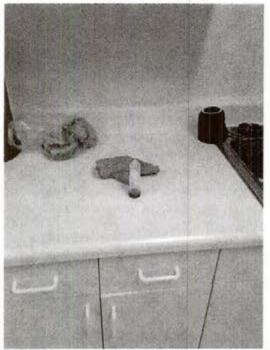


Photo 11: Lead wipe sample 052714-CST-W-07 collected from Building 6 break room countertop.



Photo 12: Lead wipe sample 052714-CST-W-08 collected from Building 6 medical laboratory floor.

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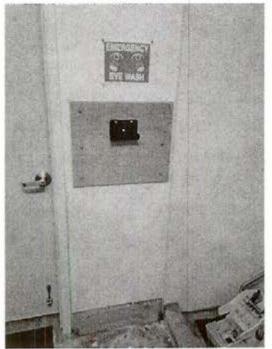


Photo 13: Building 6A chemical storage/use are missing an emergency eyewash station.

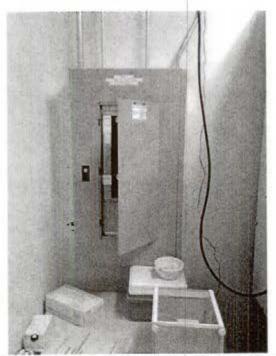


Photo 14: Obstructed electrical panel in the biological safety hood room in Building 6A.

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Photo 17: Fire extinguishers were present with expired monthly and annual inspections throughout the facility.



Photo 18: Classroom fire extinguisher showing signs of rust damage.

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PHOTO LOG 10th CST Camp Murray, WA May 27, 2014



Photo 19: POL storage shed located behind Building 6A, missing inventory and MSDS.



Photo 20: Second POL storage shed located behind Building 6A, missing inventory and MSDS.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 260 of 980

PHOTO LOG 10th CST Camp Murray, WA May 27, 2014



Photo 21: Rusted drums stored behind Building 6A, reportedly used for training exercises.

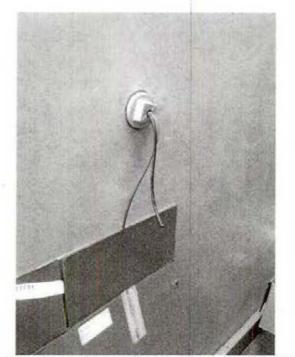


Photo 22: Loose wiring on the western wall of Building 6A.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 261 of 980

PHOTO LOG 10th CST Camp Murray, WA May 27, 2014

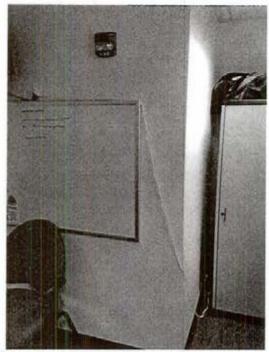


Photo 23: Extension cord used for non-temporary purposes in the Survey Leader's office.

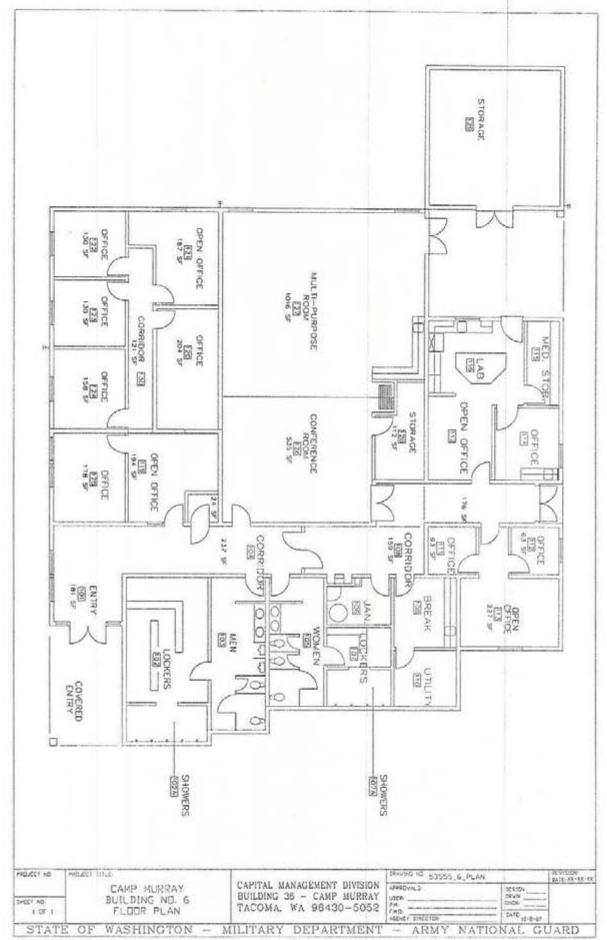
Page 12 of 12 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 262 of 980 10th Civil Support Team Building

| WSDS # | ITEM | MANUFACTURER | patch | PNI BARCODE | Urm | 110 | LUL |
|---|---|----------------------------------|-------------------------|--------------------|------------|-------|-------|
| 1002 | ACETIC ACID, 50% | UNK | | 1002 | JAR | 1 | ALS |
| A6014 | ACRIMINE ORANGE HEMI | SIGMA A6014-109/MW08471 | | A6014 | JAR | | ALS |
| 05451752160 | BU-CLEAN | BIO VERIS CORPORATION | 39941 | c7o9qx9n773ovpko8 | π | e | ALS |
| 05451787160 | BV-OILUENT | BIO VERIS CORPORATION | 39941 | c7o9qx8ro9fd4clq2 | 250mL | 6 | ALS |
| 05451779160 | BV-GLO | BIO VERIS CORPORATION | 39944 | c7o9tuct717vkqBo | 11 | m | ALS |
| 05451809160 | BV-SANATIZE SOLUTION | BO VERIS CORPORATION | | 110285 | | - | ALS |
| 05451795160 | BV-STORE | BIO VERIS CORPORATION | 39940 | tknin 1tb2hsyhhloa | 250ML | 4 | ALS |
| EX0276 | ETHYL, ALCOHOL PURE 200 PROOF | EMD CHEMICALS INC. | | EX0276 | 18 | - | ALS |
| J323 | GRAM STAIN KIT(IODINE, CRYSTAL VIOLET, | PROTOCOL | | 666501X010462 | X | - | ALS |
| 05451825160 | | BIO VERIS CORPORATION | 40063 | 05451825160 | 100mL | - | ALS |
| 05451817160 | M SERIES POSSITIVE CALIBRATOR | BIO VERIS CORPORATION | 40057 | 05451017160 | 100mL | - | MS |
| A452-1 | METHONAL (HPLC GRADE) | HSHER SIENTIFIC | | A452 | - | • | ALS |
| A19126 | PARFLUOROTRBUTYLAMINE, MASS SPEC STD | ALFA AESAR | 10138387 | 666501X012128 | BT 5G | - | ALS |
| 194484 | PENTAFLUOROBENZYL (D-(2,3,4,5,6- | SIGMA ALDRICH | and the share and a set | P194484 | 81 | | ALS |
| HI6010 | PH STANDARD | HANNA INSTRUMENTS | 1768 | HI6010 | SoomL | - | ALS |
| B73104 | 1 BROMONAPHTHALENE 97% | SIGMA FB73104-100g/ | | b73104 | 1003 | 1000 | MED 1 |
| P50609 | 1.3 PROPANEDITHIOL 99% | ALDRICH p50609-5g/ | 00730CH | P50609 | BI | - | MEDT |
| D2522 | 1.4 DIAZABICYCLO(2.2.2) OCTANE | SIGMA D2522-25g/SL09101 | | D2522 | 19 | - | MED 1 |
| SLA1564 | ACETIC ACID, 3% (IN METHONAL) | MIXTURE | | MIXTURE | IS | - | MEUT |
| A6014 | ACRIDINE ORANGE HEMI | SIGMA A6014-10g/MW08471 | | A6014 | JAR | - | MEUT |
| QSL26 | ALCOHOL DENATURED | W.M. BARR & CO INC | | 101020261000 | 5 | - | MEU |
| 350000015760 | BUG REPELLENT, OFF | JOHNSON & JOHNSON | | 0405090018428 | CAR | | MED 1 |
| DX0838 | DICHLOROMETHANE HPLC | EMD CHEMICALS INC. | | DEDUAL | , | v | |
| 34856 | DICHLOROMETHANE HPLC 99.8% | SIGMA 34856-100mL/SF08254 | 48340 | H650DX0834725 | 100mL | 2 | MED 1 |
| 004949 | DURSBAN PRO, INSECTICIDE | DOW AGROSCIENCES | | 46482 | 81 | | MED1 |
| E7023 | ETHANOL, ABSOLUTE, 200 PROOF | SIGMA-ALDRICH CO | 04796MK | E7023 | BT(500mL) | 350mL | MED 1 |
| 362808 | FTHANOL DENATURED. REAGENT GRADE | SIGMA-ALDRICH CO | 21297HJ | 362808 | 18 | - | MEU 1 |
| F3543 | FLOURESCENT BRIGHTENER 28 | SIGMA F3543-1g/SL08341 | | F3543 | 18 | 5 | MEDI |
| HOWES | FUEL TREATMENT, DIESEL CONDITIONER | HOWES LUBRICATION | | 707533306011 | BT 1.9L | - | MED 1 |
| 650552 | HEXANE, HPLC 95% | SIGMA 650552-IL/SF05084 | | 650552 | _ | - | MED 1 |
| Trak-300 | Immersion Oil, Automated Differantial Sys | RICHARD-ALLEN SCIENTIFIC (M8000) | | M6000 | 473mL | - | MED 1 |
| CME71 | Methyl Ethyl Ketone, Klean Strip | W.M. BARR & CO INC | | 030192071151 | ō | - | MED 1 |
| 0101.010 | OIL 15 WT UNLTAGRADE | EDWARDS | | h11026015 | 17 | 2 | MED 1 |
| SP15-100 | PERMONATION UENE SOLUTION | UN 1294; SP15-100; CAS 108-88-33 | 208381 | SP15-100 | 100mL | 100mL | MED 1 |
| SP15-100 | PERMOUNT (TOLUENE SOLUTION) | UN 1294; SP15-100; CAS 108-88-33 | 000687-24 | SP15-100 | 10001 | 75mL | MED 1 |
| S9008 | SODIUM CHLORIDE, ACS | SYGMA ALT | S9888-1K | S9888 | KG | - | MED 1 |
| MW08221 . | TRITON X 100 | SYGMA ALT | 06621EH | 234729100ML | 18 | - | MED 1 |
| GKY24 | XYLOL, XYLENE | W.M. BARR & CO INC | | 000192024256 | CI | - | MEUI |
| Green - REPLENSH STOCK - Order thru F BLUELORDER ON Å ÅS NEEDED BÅSIS PUIDDI E- CUECK IG MARNS IS IN BINNER | Green - REPLENDH STOCK - Order thru HMCO or KAR BLUE! ORDER ON AAS NEEDED BASIS Drivin C. ALECVI IE HERRO IS HIL BIMOED | | | | on-Respons | | |
| | | | | | | | |

HAZARDOUS MATERIAL INVENTORY

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 264 of 980

IAQ MEASUREMENTS 10TH CST CAMP MURRAY, WA MAY 27, 2014

| Location | CO2 max permissible level 1,175 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO Max permissible 200 ppm STEL |
|-----------------------------------|---|---|------------------------------------|---------------------------------------|
| Outdoor Control | 475 | 61.1 | 44.0 | 1.2 |
| | | Building 6 | | |
| Office 117 | 509 | 65.5 | 46.6 | 1.2 |
| Medical Lab | 535 | 66.2 | 46.8 | 1.3 |
| Office 113 | 519 | 65.9 | 45.9 | 1.3 |
| Break Room | 547 | 66.3 | 45.7 | 1.4 |
| Janitorial Room | 531 | 66.0 | 45.5 | 1.3 |
| Men's Locker Room | 533 | 67.6 | 46.8 | 1.3 |
| Conference Room (Offices) | 510 | 68.1 | 45.8 | 1.3 |
| Multi-Purpose Room (Classroom) | 512 | 68.1 | 45.5 | 1.3 |
| Office 119 | 501 | 67.7 | 44.1 | 1.3 |
| Office 125 | 541 | 68.1 | 44.5 | 1.4 |
| Office 122 | 529 | 67.3 | 44.5 | 1.4 |
| Entrance Lobby | 517 | 67.2 | 43.6 | 1.4 |
| Supply Closet | 559 | 68.3 | 44.1 | 1.4 |
| | M | Building 6A | | |
| Building 6A Supply Office | 731 | 68.9 | 47.5 | 6.8 |
| Vehicle Parking Bay East | 513 | 68.8 | 44.6 | 5.2 |
| Vehicle Parking Bay Center | 491 | 68.2 | 44.1 | 5.8 |
| Vehicle Parking Bay West | 501 | 68.1 | 44.2 | 5.9 |

BOLD = Outside of permissible range CO2 = Carbon Dioxide CO = Carbon Monoxide

°F = Fahrenheit

RH = Relative Humidity

ILLUMINATION SURVEY 10th CST Camp Murray, WA May 27, 2014

| Room | Location | Light Measurement (FC) | Minimum Lighting Requirement (FC) |
|-------------------------------|------------------|---------------------------|--------------------------------------|
| | Buil | ding 6 | |
| Office 117 Desktop | | 73.1 | ≥ 50 |
| Medical Lab | Desktop | 90.5 | ≥ 50 |
| Office 113 | Desktop | 61.8 | ≥ 50 |
| Break Room | Tabletop | 34.8 | ≥ 10 |
| Janitorial Room | Center of Room | 31.5 | ≥ 10 |
| Men's Locker Room | Center of Room | 47.5 | ≥ 10 |
| Conference Room (Offices) | Desktop | 56.9 | ≥ 50 |
| Multi-Purpose (Classroom) | Tabletop 56.6 | | ≥ 50 |
| Office 119 | Desktop | Desktop 70.7 | |
| Office 125 | Desktop | Desktop 81.3 | |
| Office 122 | 2 Desktop 72.2 | | ≥ 50 |
| Entrance Lobby Center of Room | | 59.0 | ≥ 10 |
| Supply Closet Center of Room | | 14.9 | ≥ 10 |
| | Build | ing 6A | |
| Building 6A Supply Office | Desktop | 52.1 | ≥ 50 |
| Vehicle Parking Bay | East Side of Bay | 32.6 | ≥ 30 |
| Vehicle Parking Bay | Center of Bay | 34.3 | ≥ 30 |
| Vehicle Parking Bay | West Side of Bay | 37.7 | ≥ 30 |

*FC = foot candle measurement

Bold = Insufficient Lighting

BEST AVAILABLE COPY Exhaust Ventilation System Survey Facility: 10th CST, Camp Murray, WA Date: 5/27/2014

Name of LEV System: Steril GARD III Advanced - BSL Class 2, Type A2 Safety Cabinet

| lodel: SG 30 | 3 | | Serial Number: | 83246 |
|---------------|----------------|---------------------|------------------------------|-------|
| imensions o | f LEV: | 7" x 28" (S | ash Opening) | |
| ketch of vent | ilation measur | ement grid; all mea | surements in feet per minute | (fpm) |
| 105 | 105 | 114 | | |
| 261 | 216 | 168 | | |

NOTES:

The safety cabinet is used for sample preparations as a clean work station. The cabinet's sash locks open at a height of 7 inches, which was reported to be the 'working condition' of the BSL. No chemicals are reportedly used inside the cabinet. The exhaust vents into the room after HEPA filtration. The cabinet was last tested and certified on 1/11/2013 with annual certification due in January 2014.

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|--|--|--|---|--|---------------------------------------|
| NES | | Facil | ity Informat | tion For | m |
| nous, ar sgivhslaret | | | | | |
| General Facility Information | ponsive | | Date(s) of | Previous IHS | SAVS: 2011 - unavailable |
| IH(s): | | - | | Date(s) of IH | |
| Facility Name: 134 | ilón, t | 5,6A | SE | | |
| Address: | BLibin | n. 6 | | | |
| Facility Commander: | | | | | |
| Safety Officer: _ | | Or | I-R | (e | sponsi |
| No Person(s): 22 | | | | | |
| (Include status -AGR, Fed, | Tech., IDR, | State or Con | tract Employee) | M. | >F |
| Unit(s): 10 ⁴¹ | CST | | Co-Tenant(s): | No | ne Build Date: 2004 - 200 |
| In | clude UIC if a | vailable | _ | | st All |
| Primary workAd. activities at Facility: | mìn - | training, | Operations | Fesper | Renovation: <u>N/A</u> |
| | | | | | · |
| Written Health & Safety F | rograms / | SOPs | | | |
| Drogram | Program | Have | Date of Last | # | |
| Program Confined Space | Needed | Program | Training | Enrolled | By Person upon hte |
| | | N | | | |
| Emergency Preparedness | . У | N | <u> </u> | | Mead Brilling Manager Hundback |
| | | | Ugun Lovia | | |
| Hazard Communication | У | N | CA Tets | | ~ . |
| | 1 | | CA 20012 | | у <u>к</u> |
| Hazard Fechnician Hazard Communication Hearing Conservation | N | N | Jan 2014 | | × 2 |
| Hazard Communication Hearing Conservation PPE | N Y | N Y | Jan 2014 Cet 2013 | | ~ |
| Hazard Fechnician Hazard Communication Hearing Conservation | N | N | Jan 2014 | | ~ |
| Hazard Communication Hearing Conservation PPE | N Y Y | N 4 4 | Jan 2014 Oct 2013 Jan 2014 Oct 2013 |) – List on ba | |
| Hazard Communication Hearing Conservation PPE Respiratory Protection | M Y Y Dock Out / Tag Ou | N Y Y, Lifting Device | Jan 2014 Oct 2013 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. |) – List on ba | |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo | M Y Y Ock Out / Tag Ot = Not Applica | N Y Y, Lifting Device | Jan 2014 Oct 2013 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. |) – List on ba | |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA | M Y Y ock Out / Tag Ou = Not Applica Obtain | N Y H. Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | | |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to | M Y y y ock Out / Tag Ou = Not Applica Obtain vacuation magnetic | N Y Ut, Lifting Device ble to this site | Jan 2014 Oct 2013 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | | ck flaterials inventory |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / ev List of equipment set , Previous IH reports | M Y Y Sock Out / Tag Out = Not Applica Obtain vacuation many rviced / main | N Y Ut, Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | Hazardous N | ck Materials inventory |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / en List of equipment set Previous IH reports NA = Not Applicable to th | M Y Y Sock Out / Tag Out = Not Applica Obtain vacuation many rviced / main | N Y Ut, Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | Hazardous N Personnel lis | ck Materials inventory |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / ev List of equipment set Previous IH reports NA = Not Applicable to th Non – DoD Contractors | N Y Ock Out / Tag Ou = Not Applica Obtain vacuation main vacuation main | N Y Ut, Lifting Device ble to this site | Jan 2014 Oct 2013 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | Hazardous N Personnel lis Others (List) | ck Naterials inventory |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / en List of equipment services NA = Not Applicable to the Non – DoD Contractors Service | M Y Y Sock Out / Tag Out = Not Applica Obtain vacuation many rviced / main | N Y Ut, Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Jan 2014 Oct 2013 s. Radiation, SOPs, etc. | Hazardous M Personnel lis Others (List) | ck Materials inventory |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / ev List of equipment ser Previous IH reports NA = Not Applicable to th Non – DoD Contractors Service Oil / Water Separator | N Y Ock Out / Tag Ou = Not Applica Obtain vacuation main vacuation main | N Y Ut, Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | Hazardous M Personnel lis Others (List) ice dry | ck Naterials inventory |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / ev List of equipment service Previous IH reports NA = Not Applicable to the Non – DoD Contractors Service Oil / Water Separator Tools | N Y Ock Out / Tag Ou = Not Applica Obtain vacuation main vacuation main | N Y Ut, Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. Servi Laun Pest | Hazardous N Personnel lis Others (List) ice dry Control | Aterials inventory t |
| Hazard Communication Hazard Communication Hearing Conservation PPE Respiratory Protection Others (Bloodborne Pathogens, Lo Y = Yes N = No NA Documents / Records to Facility floor plan / ev List of equipment ser Previous IH reports NA = Not Applicable to th Non – DoD Contractors Service Oil / Water Separator | N Y Ock Out / Tag Ou = Not Applica Obtain vacuation main vacuation main | N Y Ut, Lifting Device ble to this site | Jan 2014 Jan 2014 Jan 2014 Jan 2014 Oct 2013 s, Radiation, SOPs, etc. | Hazardous M Personnel lis Others (List) ice dry | Aaterials inventory it Provider |

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| May, 2018 | |

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Industrial Hygiene Site Assessment Visit (IHSAV) Scope of Work (Checklist) Revised: May 14, 2014



| Done | Task | | | | | |
|--------------|--|--|--|--|--|--|
| 1 | Review File: Past IHSAV Reports (determine additional tasks to be completed) & completed forms | | | | | |
| ~ | Opening Conference: intro, IHSAV summary, ID POC's, review Facility Work Activities, ID Non-DoD Contractors (o/w separator, laundry, tools, pest control, rags, haz waste, refuse, crane maint., etc.), & discuss civilian activities performed onsite (use of drill floor or other facilities). | | | | | |
| ~ | Complete Facility Information Form | | | | | |
| V | Record Adjacent Properties (North, South, East, West) | | | | | |
| \checkmark | Safety Program / SOP Review: review safety programs, list those present & date of most recent revision | | | | | |
| V | Safety Training Review: review training records, list topics covered & date of most recent training | | | | | |
| V | Obtain/Review Pervious IH Assessments | | | | | |
| N/A | Conduct Personal Breathing Zone Sampling; record data in Exposure Sample Data Sheets | | | | | |
| 1 | Collect IAQ measurements (collect outdoor control), record data on IAQ & Illumination Measurement Form | | | | | |
| V | Collect Lighting Measurements, record data on IAQ & Illumination Measurement Form | | | | | |
| V | Collect metal wipe samples; record data on Wipe Sampling Summary Form | | | | | |
| V | Identify Exhaust Ventilation systems & collect measurements; record data on LEV System Survey Form | | | | | |
| NIA | Identify Noise Hazardous areas & collect sound level measurements; complete DD 2214 Noise Survey Form | | | | | |
| V | Develop list of IH equipment used during IHSAV; record data on Equipment List Form | | | | | |
| V | Asbestos Survey: identify whether facility has Asbestos Inspection Report, list suspect building materials present within facility; identify damaged suspect materials (take pictures) | | | | | |
| V | Lead Paint Survey: identify whether facility has deteriorating paint, list areas & substrate where deterioration is occurring (take pictures), & collect bulk samples were paint is not adhered to substrate | | | | | |
| ~ | Mold Survey: identify evidence of moisture intrusion (take pictures), identify any historic water intrusion / mold issues, identify presence or lack thereof mold growth | | | | | |
| V | HVAC / Facility Ventilation Survey: conduct a general assessment of HVAC / facility ventilation system, define how fresh air is provided, & develop written summary | | | | | |
| / | HAZMAT Inventory & Storage: obtain chemical inventory &evaluate areas where chemicals are stored | | | | | |
| M/4 | POL Handling & Storage: evaluate how POL is handled & stored | | | | | |
| MA | General & Tool Supply Area (If Present): evaluate general condition of tool & supply areas | | | | | |
| J | Safety Walkthrough: Conduct a walk of the entire facility & document conditions, violations & findings; record data on General Safety Compliance Assessment Form | | | | | |
| / | Complete Photo Log: including front / back of facility, sample locations & all conditions observed | | | | | |
| NA | Converted IFR: Verify that historically an IFR was not present, if present conduct applicable lead samples. | | | | | |



Industrial Hygiene Site Assessment Visit (IHSAV) Scope of Work (Checklist) Revised: May 14, 2014



| MA | Paint Booth: complete the paint booth evaluation checklist & conduct ventilation assessment |
|----|---|
| ~ | Conduct detailed Hazard Assessments (prioritized by highest risk); complete IH Hazard Assessment Forms SEE Attached checklist for common UTES work activities |
| | Conduct Closing Conference to summarize findings & Immediate Hazards |

Bold Font = Form is available in H:\Army National Guard\IHSAV Documents\Forms



General Salety Compliance Assessment Form

5/17/14

Date:

Revised: September 18, 2013



| Bloodborne Pathogens (1910.1030) | Mar | 1 | Not Applicable | | |
|--|----------|---------|--|-----------|--------|
| Waste containers | Yes | + | No | | |
| PPE available | Yes | _ | No | | |
| Compressed Gases (1910.101105) | → Applic | able | Not Applicable | | |
| Labeled (contents / empty) | Yes | Course | No | | |
| Good condition | Yes | | No | | |
| Proper storage (O2 vs. flam, chained, upright, etc.) | Yes | | No | | |
| Flammable cylinders grounded | Yes | _ | No | | |
| Confined Space (1910.146) | Applic | able X | Not Applicable | | |
| Labeled w/ "Danger" sign(s) | Yes | 1 | No | | |
| Calibrated direct reading instruments | Yes | T | No | | |
| Entry materials / supplies | Yes | + | No | | |
| Electrical Safety (1910.301335) | → Applic | able | Not Applicable | | |
| GFCI plugs | -/ Yes | euro | No | | |
| Loose / hazardous wires | × Yes | - | STATE STATE AND A STATE OF A STAT | | |
| Electrical panels unobstructed & labeled | Yes | | | | |
| | | X | No | | |
| High voltage (>600V); signage / work | - Yes | | NO NIA | | |
| Emergency Eyewash / Shower (1910.151) | X Applic | able | Not Applicable | | |
| Inspection records | Yes | 12.53 | No | i. | |
| Unobstructed | Yes | | No Did not | there eye | 144-7- |
| Properly protected (caps over eyewash, etc.) | Yes | | No | 70 | unsn |
| Emergency Preparedness (1910.3438) | 4 Applic | able | Not Applicable | | |
| Alarm system | Yes | | No | | |
| Exits marked / free of obstruction | Yes | | No | | |
| Ergonomics (Gen. Duty Clause) | + Applic | able | Not Applicable | | |
| Workplace evaluation conducted | Yes | × | No | | |
| Hazard control / precautions in place | V Yes | | No | | |
| with matching of the second second | 1000 | | | | |
| Fall Protection (1910.2328 & 1926.501503) | Applic | able 7 | Not Applicable | | |
| Elevations of 4ft have railings / toeboard | Yes | | No | | |
| Fall protection is in good condition | Yes | - | No | | |
| Training received / documented | Yes | · · · · | No | | |
| Fire Safety (1910.39 & 1910.157) | 4 Applic | able | Not Applicable | | |
| Fire extinguishers present | × Yes | | No | | |
| Fire extinguishers properly inspected | Yes | × | No | | |
| Sprinklers unobstructed | · Yes | | No | | |
| Training received / documented | Ves | | No | | |
| Forklift, Jacks & Industrial Trucks (1910.178) | Applic | able 1/ | Not Applicable | | |
| Labeled with inspection / service date | Yes | | No | | |
| Training received / documented | - Yes | | No | | |
| Overhead protection | - Yes | + | No | | |
| | | seble | Not Applicable | | |
| Hand & Powered Tools (1910.241244) | Applic | abie | Not Applicable | (| |
| Proper guarding & controls | - Yes | | No | | |
| 3-prong power cord | - Yes | | No | | |
| Inspections | Yes | _ | No | | |
| Hazard Communication (1910.1200) | 2 Applie | able | Not Applicable | | |
| Chemical inventory | 🔨 Yes | - | No | | |
| Materials labeled | X Yes | | No | | |
| | | | | | |

Page 1 of 2



General Safety Compliance Assessment Form Facility:_____

Date:



Revised: September 18, 2013

| Hazardous Materials (1910.106107) | | Applicable | | Not Applicable | |
|--|--------|------------|-----------|----------------|-----------------------------|
| Storage (quantity, upright, sealed) | X | Yes | | No | |
| Storage cabinet (flammable & corrosive) | X | Yes | _ | No | |
| Safety equip. present (eyewash / shower/spill kit) | X | Yes | | No | |
| Hazard signs at entrance (NFPA, etc.) | ~ | Yes | | No | |
| Proper segregation | X | Yes | | No | |
| Hearing Conservation / Noise (1910.95) | 4 | Applicable | A. | Not Applicable | |
| Audiometric testing | G. 162 | Yes | 1 | No | |
| Noise haz. areas (>85dBA) present / labeled | | Yes | T | No | |
| Exposure monitoring | | Yes | t | No | |
| Heat Stress (General Duty Clause) | | Applicable | 4 | Not Applicable | |
| Worksite evaluation | - | Yes | | No | |
| Precaution / control measures | _ | Yes | | No | |
| Ladders (1910.2527) | 12 | Applicable | × | Not Applicable | |
| Sturdy / good condition | 1de | Yes | 1 | No | |
| Training received / documented | - | Yes | T | No | |
| Overhead Crane (1910.179) | | Applicable | f | Not Applicable | |
| Written procedures | | Yes | 1 | No | |
| Training received / documented | | Yes | + | No | |
| Rated load markers | - | Yes | + | No | |
| Warning devices (power travel mechanism) | | Yes | + | No | |
| Inspection / testing / certification | | Yes | + | No | |
| PPE (1910.132, .133, & .135138) | × | Applicable | | Not Applicable | |
| Proper type / selection / use | × | Yes | | No | |
| Hazard assessment conducted | _ | Yes | × | No | |
| Respiratory Protection (1910.134) | 4 | Applicable | | Not Applicable | |
| Proper type / selection / use | | Yes | | No | |
| Medical surveillance / fit-testing | 1 | Yes | | No | |
| Walking / Working Surfaces (1910.22) | X | Applicable | | Not Applicable | |
| Floors / aisles dry | 1 | Yes | | No | |
| Floors / aisles unobstructed | T | Yes | _ | No | |
| Openings guarded | 1 | Yes | _ | No | |
| Welding, Cutting, Brazing (1910.94 & 261 255) | | Applicable | × | Not Applicable | |
| Local exhaust ventilation | - | Yes | 1 | No | |
| Exposure assessment conducted | | Yes | - | No | |
| Guards / barriers | | Yes | T | No | |
| Building Material Hazards | | | | | |
| Asbestos | - | 10000000 | 11-25 | | |
| Suspect materials present | V | Yes | | No | |
| | 4 | Yes | V | No | If yes, obtain copy |
| Is there an ACM Inspection Report | | 165 | 4 | | n jes, obtain copy |
| Lead | | | 2 | | |
| Peeling paint present | | Yes | × | No | If yes, collect bulk sample |
| Mold | | | ing and a | | |
| Is there evidence of moisture intrusion? | | Yes | × | No | |
| Is there current moisture intrusion? | | Yes | X | No | |
| Is there visible mold growth? | | Yes | 0 | No | |
| te plate visiola mora grawme | | 2 | 4 | | |
| | | | | | |

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1

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

10th CST

013.1H 1716.27

| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | Eight lead wipe samples were collected from Buildings 6,64, and SE, Sample results are provided in Appendix I. |
|--|---|
| 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) | See Appendix I |
| 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 peeling paint was identified. Painted surfaces were in good-and intact condition. |
| Are there any signs of water damage or mold? | No signs of water damage observed. Historical damage is noted in field notes (Appendix G) |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | Yes, see field notes for a list of suspect ACM |
| Quality of housekeeping | Good, well-organized |
| HVAC maintenance plan in place? | Yes, maintained by State, no |
| Overall condition of HVAC system | written plan available Good, no exposed hazards |
| Obtained CO2, Temp, RH monitoring | complete, see appendix E |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | MSDS available with written inventory. Does not include clamshell storage behind Bldg. 6A |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | Good, organized and properly segregated. |

| 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, F.E. were expired for monthly and annual inspections |
| Annual fire extinguisher inspections tags current | No, expired (2012 last inspection) |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | Chemical storage/use in Bity. 6A No eyewash station is present |
| 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) | 4es, see Facility Information Sheet (Appendix Q) |
| Any Photo labs | No |
| Any hazardous noise sources | None identified |
| Light levels checked throughout building | Yes, see Appendix É |
| 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.? | See Facility Information sheet |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | None |
| Obtain two lead air samples | On IHSW Request Only |

2

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | None present | 1 |
|---|--|---|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | None present | |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | completed, see Report for findings | |
| <u>Take photos</u> of outside of building, all sample points and any pertinent hazards or concerns. | Completed, see photo log (Appendix C) | - |
| Name of Armory, POC, phone #, address and organizations in Armory | Non-Responsive | |
| (Add Checklist to Report) | (Add Checklist to Report) | |

Comp Murray, 10th CSt 5/27/14 Asbestess Lead, Mold BIJ 5E - No ACM Really Point, of which of Mainter intrustan B129 68 64 Ashestas Drywall, Joint Compand, Tape VSF & Mustic Bise Cove & Mustic VFT & Mustic Ceiling Tiles 2×4 Curpet Mastic Level No evidence of Chipping Print Mold Verson Has notes historical problems an No current Evidence 426 moisture intrusion of HVAC 64 heating units Wall Warehouse mounded Supply of return Ducted Sujepty air. office: 6A Return air to located in I run at ducting of white below the cellin; 6 Supply & return six HVAC System Ducted A11 3ystems mointohed by state monterare Man By

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10th CSt, comp M. my Program Review 5/27/14 (Paris to praise) Building museyer Hundbeck Haziam of Emergeny Prop. Radiation SOP (April 2014)2013) Protection Program (April RESPRICTATION 2014) Icremental Analyticul System Lebratory (ALS) May 2013 - Includes SOP'S for approaching an inproury scene & precoutions (PPE) to use - Testing methods Training Receids (Received Truining Hazment 12 word anginiment onneul vetresher ist retresh 62014 - Chansal Response of PPE - Respiratory Protection - Blood hime pathogens Radiation Safety -(Taken online by each employee Confined Space Training (Dec 2013 Medsicul Surveilary Physicals performed annually

5127/12 camp Murray - CST 013.141716.27 (both commendables, Poc: Non-Respo Historical: Water pipe burst in Jan 2011 Plooded throughout. Previous floods in 2005, 2007 (Sewage). Sampled for fungal growth => found Built 2004 - 2005, occupied by CST in 2005 Floors sealed w/ moisture barrier Surroundidas E S Posted to NGB FOIA Reading Room **BEST AVAILABLE COPY**

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Camp Murray - CST 5/27/14 013.141716.27 Photo Log 1. Lead wipe sample 052714-CST-W-DI, blg SE floor Osurvey section .1 -02 blog 6A, floor @ westend -05, bldg 6A, vault floor 3. blog 64, floor @ center bay 4. "-03 5. bldg 6A floor Peastend bldg 6, classroom table top 6. "-07 bldgle, breakroom countertop 77. "-08 bldgle, medical lab floor 8. 9. Hood in blog 6A 10. Hood exhaust into room & 11. Obstracted electrical cabinet in hood room (bldg. 64) 12. Wiring on west wall of bldg 6A * 13. Missing eyewash station in blog lon K 14. Obstructed dectrical panels in supply of * 15. Outdoor POL storage in clamshell wil 2 contain * 16. flamm. glso unknown by whom * 17. FE expired annual & monthle + 18. Blocked electrical panel w/ paper storage + 19. FE rusted in classroom * 20. Extension cord as wiring in survey leader's office 21. 22 28 24. 28

| a Learner Learner | BEST AVAILABLE COPY | |
|----------------------|--|--|
| | t adams Materials Kenicu | 5127/14 |
| | Hazudous Meterals | |
| B | April 2009 Enoutry May 2013 lust update | λ |
| | Chamseals stored in Flammable lockers | |
| | chamicals used for Laboratory purposes | |
| | Flow Lockers in building | |
| | Flom Lockers in building Chamically Segregated properly | |
| | Chan Berry Building | |
| | Varcoum | |
| | Mop - Black in water. | |
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BEST AVAILABLE COPY Mutdoor Facilit Kenzi Brilding 6 5127/14 North : Parking Wish / Recon Arca Lot / Storge / Vehille Rust: open Lot Wooded A. Wes Brilling 6A MOSSE aran) certside brick growing On Trus Buildin wuch Bit Building 62/ 420 14 Wested Are Labradad Wigh Euch Bulding 6/ Perhing Lot North : fait Bild 5 Sich Rustin Metel Samty On Diana Para Builds SE Rodd BIDA 5A Wood 1. 11 11 w 11

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Camp Murray - CST 5/27/14 013.141716.23 Building 5E Equipment, truck/trailer storage, 4 bays, serviced by one mounted heater, no AC, ceiling fans installed (3) throughout bays. No chemical storage, has compressed gas tanks (Oa) for equipment calibratic during winter months. too cold Reported to use Weekly inventory clecks, maintenance of equip. vehicle maintenance performed on-site NO building w/ Fiberglass insulation Metal

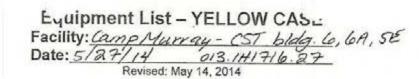
Camp Murray - CST 5/27/14 Hazard Assessment 013.141716.27 Mobile lab - Analytical laboratory Shite Ortec for spectrum-data cardonly, no rad. - All samples received are double overpached transferred to neg. pressure glove box double HEPA filtere Samples ve moved From packaging inside hood - PPE nitrile gloves on hands, put into attached gloves on box, additional gloves on inside. Gloves are replaced every few menths, new gloves are certified, buchup on hand - Air from head double scrubbed then exhausted outside of vehicle - Samples - chumical, biological, toxins, weaponsed - Eyelsplash / resp. protection provided and used when outside of rehicle - Harmat MeOH, dichloromothane, acetone small quantities inside of small Plame locher - Duration ~ Thour per day - Vehicles are not taken into hot zone For field responders - set up full decon - Other hazards - hydrogen generator and liquid nitrogen for equipment. - FE available, serviced armually, checked monthly - Alacons on equipment for top pressure loss, 5gas wonitor used when operational Posted to NGB FOIA Reading Room BEST AVAILABLE COPY FOIA Requested Record #J-15-0085 (WA) May, 2018 Released by National Guard Bureau

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CST Closing Meeting 013.141716.2 Sampling 5/27/14 IAQ, Lighting Lead wipes - bldg 6, 6A, 5E Ventilation - BSL Cabinet Walkthrough Findings electrical panels - 6A, 6 Missing eyewash station. Fire Extinguishers missing monthly/annual Extension testeds cords used as wiring Outdoor POL storage in clamshells unchecked, no ventilation

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| Туре | Model Number | Serial Number | Calibration Date |
|---------------------------------|--------------------|---------------|-------------------|
| Gray Wolf IAQ Meter | IQ-410 | 01-936 | January 2014 |
| TSI VelociCalc Plus | 8385A | 02110331 | July 2013 |
| Extech Light Meter | 407026 | Q105859 | October 2013 |
| Quest Sound Level Meter | 2 900 - | -CDG060006 | June 2013- |
| Quest Acoustic Calibrator | QC-10- | -QIF010094_ | -July 2013. |
| Gil Ari-5/Basic Pump | N/A | 13520713517 | - N/A- |
| | | | |
| | | | |
| | | | |



LEV System Survey Form Facility: CST - BLAG 6, 6A, SE Date: 5/27/14 013.111716.27 Revised: May 8, 2014



Name of LEV System: Seril GARD THE Advanced Serial Number: 83246 Model: SG 303 " × 28 " **Dimensions of LEV:** OR " diameter 7 X X X 105 14 05 261 168 216

NOTES:

NOTES: Hood used for sample prepas a clean Work station, no chemical reportedly used last tested 1/11/13 due on 1/2014. Exhaust vents into the room. Biological Safety Cabinet (lever 2)

Name of LEV System:_ Serial Number: Model: " X Dimensions of LEV: OR " diameter

NOTES:

For Vehicle Exhaust Ventilation Systems, obtain the following:

(1) types of vehicles serviced in each Bay, (2) average tailpipe temp., (3) engine displacement, & (4) RPM's.

NOTE: information may not be available for each vehicle, but obtain what you can. Posted to NGB FOIA Reading Room BEST AVAILABLE COPY May, 2018

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...pe Sampling Summary Forn.

Facility: LST-Bldg. 6.6A

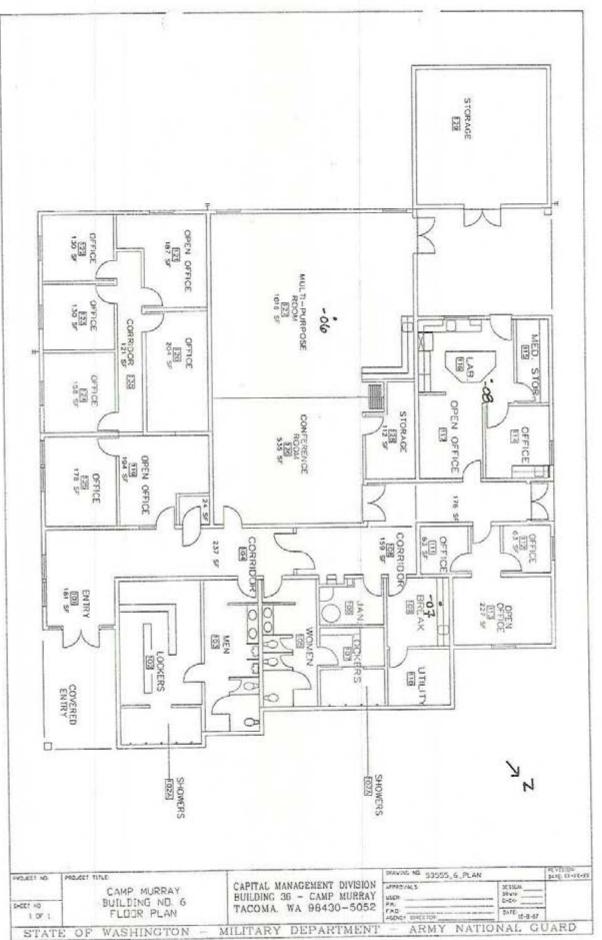
Collected By:



Date & Time: 5/27/14 Revised: September 18, 2013

| | Sample Informatio | n | Sample Area | Area Units | Analyte(s) |
|----|-------------------|---|-----------------------|------------------------|------------|
| | Sample Number: | 052714-CST-W-01 | | | |
| 1 | Sample Location: | DI EF PI I CO | 1 | A2 | Lead |
| | Sample Number: | 152714-157-10-02 | | | |
| 2 | Sample Location: | Bldg. 6A floor @ west | and the second second | | |
| | Sample Number: | 052714-CST-W-03 | | | |
| 3 | Sample Location: | DILLA NI O LA | | - seal on the Property | |
| 4 | Sample Number: | | | | |
| - | Sample Location: | 052714-CST-W-04 Bldg. 6A floor @ east end | | | |
| E | Sample Number: | | | | |
| 5 | Sample Location: | 052714-057-w-05 Blag. 6A. Vault Floot | | | - |
| 6 | Sample Number: | 052714-CST-W-06 Bldg.6-Classroom tabletop | | | |
| 0 | Sample Location: | | | | |
| 7 | Sample Number: | 052714-CST-W-07 Blog. 6-Broakroom conntertop | | | |
| 1 | Sample Location: | Blog. 6-Breakroom on merterte | 2 | | |
| 8 | Sample Number: | 052714-CST-W-08 | | | |
| 0 | Sample Location: | Bldg. 6-Medical lab | | | |
| 9 | Sample Number: | | | | |
| 9 | Sample Location: | | | | |
| 40 | Sample Number: | | | | |
| 10 | Sample Location: | | | | ÷. |
| 14 | Sample Number: | | | | |
| 11 | Sample Location: | | | | |
| 40 | Sample Number: | | | | |
| 12 | Sample Location: | | | | |
| 13 | Sample Number: | | | | |
| | Sample Location: | | | | |

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LEAD WIPE SAMPLE LOCATIONS

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In & Illumination Measureme...cs Facility: <u>(ST - Bldg 6, 6A</u> Date: <u>S/87/14</u> 013.1H17/6.27 Revised: September 18, 2013



| Location | CO2 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) |
|--|--|---|---------------------------------------|---|----------------------|
| Bldg. 6 A Supply office | 731 | 68.9 | 47.5 | 6.8 | 52.1 |
| Vehicle East Parking bay | 513 | 68.8 | 44.6 | 5.2 | 32.6 |
| Vehicle Parking bay center | 491 | 68.2 | 44.1 | 5.8 | 34.3 |
| Vehicle Parking Vehicle Parking bay west | 501 | 68.1 | 44.2 | 5.9 | 37.7 |
| | | | | | |
| | | | | | |
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| | | | | | |
| | | | | | |
| | | | | - | |

CO₂ = Carbon Dioxide °F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL = Short Term Exposure Limit



MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE **GRASS VALLEY CA 95949** 530-268-1860

Certificate of Calibration

Date: Oct 10, 2013

Cert No. 220081202166635

Customer:

NETWORK ENVIRONMENTAL

1141 SIBLEY STREET 0014 04 05520

| FOLSOM CA 956 | | Work Order #: | SAC-70062158 | |
|----------------|-------------------------------|---------------------|------------------|----|
| MPC Control #: | CD3923 | Serial Number: | Q105859/Z042817 | |
| Asset ID: | N/A | Department: | N/A | |
| Gage Type: | FOOT CANDLE/LUX METER W/PROBE | Performed By: | BARRY MORRIS | |
| Manufacturer: | EXTECH INSTRUMENTS, INC. | Received Condition: | IN TOLERANCE | |
| Model Number: | 407026 | Returned Condition: | IN TOLERANCE | e. |
| Size: | N/A | Cal. Date: | October 10, 2013 | |
| | 68.8°F / 34.5 % | Cal. Interval: | 12 MONTHS | |
| Temp/RH: | CALCULATION AND CALCULATION | Cal. Due Date: | October 10, 2014 | |

Calibration Notes:

Standards Used to Calibrate Equipment

| I.D. | Description. | Model | Serial | Manufacturer | Cal. Due Date | Traceability # |
|--------|-------------------------|-------------------------|---------|--------------------|---------------|----------------|
| 1.1.3. | | N/A | L871057 | EXTECH INSTRUMENTS | Apr 9, 2014 | 2200812107582 |
| AW6244 | FOOT CANDLE / LUX METER | a marine and the second | 5609 | LABSPHERE | Oct 20, 2014 | 2342356 |
| Z7000 | UNIFORM SOURCE SYSTEM | USS-600V | 0000 | | | |

Procedures Used in this Event

| Procedure Name | Description |
|----------------|---------------------|
| | DIGITAL LIGHT METER |
| 33K4-4-475-1 | |

Calibrating Technician:



QC Approval:



The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage 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 NIST Technical Note 1297, 1994 Edition. Services rendered comply with ISO 17025/2005, ISC 9001;2008, ANSI/NCSL 2540-1, MPC Quality Manual, MPC CSD and with customer purchase order 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 frequency of use, environmental conditions and customer's established systematic eccuracy. The information on this report, pertains only to the instrument

All standards are inacestile to SI through the National Institute of Standards and Technology (NIST) and/or recognized national or international standards laboratories. Services rendered include proper manufacture'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. identified.

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| | | BEST AVAILABLE CO | PPY | |
|---|--|---------------------------------|--|---|
| P | | | | |
| Tekt | ronix | | Certificate of | 7583129 |
| 12 | 3 | Instrument Identifica | tion | Certificate Page of 3 |
| Company ID: 607 INDUSTRIAL HY Non-Responsive 10510 SUPERFO SUITE C MATHER, CA 95 | 229 'GIENE SW ORTRESS AVE | | O Number: CC- | Ve |
| | 02110331 TSI INCORPORATED AIR VELOCITY METER | | Model Number: 8385A Serial Number: 02110331 | |
| Temperature Accur | cy: ± 3.0% Rdg. or ± 3 FPM wl acy: ± 0.3 °C (± 0.5 °F) : ± 1.0% of Reading + 0.005 ind | | | |
| | CALIERATION | Certificate informa | Technician: | Non-Responsive |
| Reason For Service: | | | | 19Jul2013 |
| Type of Cal: As Found Condition: | | | Cal Due Date: | 19Jul2014 |
| | LEFT AS FOUND | | Interval: | |
| Procedure: | 33K6-4-1769-1 AIR VELOC | | Humany. | |
| Remarks: | A test uncertainty ratio (TUR) of | 3:1 was maintained for air veid | icity. Data report attauneu. | |
| which is traceable | the performance of the above to National Metrology Institu and procedures used compl | utes (NIST, NPL, PTB) U | hat are linked to the internation | t of known accuracy, ional System of Units |

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

Approved By:

Service Repre

or

| | | Calibration Standa | rds | | | |
|-----------------|-----------|--|--------------|---------|-----------|------------|
| NIST Traceable# | Inst. ID# | Description | Manufacturer | Model | Cal Date | Date Due |
| | | RESONANT SENSOR BAROMETER | DRUCK | DPI 141 | 10Dec2012 | 10Dec2013 |
| 10333 | 01-0287 | | | | 01Mar2013 | 01Mar2014 |
| /099475 | 01-0818 | HUMIDITY & TEMPERATURE METER | VAISALA | HM34C | UTMar2015 | 0100812014 |
| 7040054 | 01-0858 | PRESSURE MODULE (10 INCHH2O ±0.06%FS) | ASHCROFT | AQS-1 | 07Feb2013 | 07Feb2014 |
| 7048264 | 01-0000 | ······································ | | | | |

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TABLE 1 LEAD WIPE SAMPLE RESULTS 10TH CST CAMP MURRAY, WA MAY 27, 2014

| Sample Number | Sample Area | Sample Location | Results (µg/ft ²) | ARNG/HUD Standard |
|-----------------|-----------------------------|---------------------------|----------------------------------|------------------------------|
| 052714-CST-W-01 | Building 5E | Floor near survey section | П | $\leq 200 \ \mu g/ft^2$ |
| 052714-CST-W-02 | Building 6A | Floor at west end | 7.0 | $< 200 \ \mu g/ft^2$ |
| 052714-CST-W-03 | Building 6A | Floor, center of building | < 25 | < 200 µg/ft ² |
| 052714-CST-W-04 | Building 6A | Floor at east end | 3.8 | < 200 µg/ft ² |
| 052714-CST-W-05 | Building 6A - Vault | Floor | 47 | $< 200 \ \mu g/ft^2$ |
| 052714-CST-W-06 | Building 6 - Classroom | Tabletop | < 1.3 | $\leq 40 \ \mu g/ft^2$ |
| 052714-CST-W-07 | Building 6 - Break Room | Countertop | < 1.3 | \leq 40 µg/ft ² |
| 052714-CST-W-08 | Building 6 - Medical Lab | Floor | < 1.3 | $\leq 40~\mu\text{g/ft}^2$ |

µg/in² = micrograms per square inch ARNG = Army National Guard

Bold - Above ARNG Standard limit



ANALYTICAL REPORT

Report Date: June 06, 2014

Ion-Responsive

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

| Phone: (916) | 353-2360 |
|--------------|------------|
| Fax: (916) | 353-2375 |
| Non-F | Pesnonsive |

Workorder: **34-1415080** Client Project ID: CST-CampMurray Purchase Order: 013.IH1716.27 Project Manager: **Non-Responsive**

Analytical Results

| Sample ID: 052714-CST-W-BI | ank | | | Collected: 05/27/2014 |
|----------------------------|-----------|--|----------------|--|
| Lab ID: 1415080001 | Sampli | ng Location: CS | ST-CampMurray | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Ghost Wipe Sampling Parameter: Area Not Applicable | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | . NA | 1.3 | |

| Sample ID: 052714-CST-W-01 | | | | Collected: 05/27/2014 |
|--|-----------|---|----------------------|--|
| Lab ID: 1415080002 Sampling Location: CST-CampMurray | | | Received: 05/30/2014 | |
| hod: NIOSH 7300 Mod. | Samplin | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 11 | 11 | 1.3 | |

| Sample ID: 052714-CST-W-02 | | | | Collected: 05/27/2014 |
|----------------------------|-----------------------------------|--|----------------|--|
| Lab ID: 1415080003 | Sampling Location: CST-CampMurray | | | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Ghost Wipe pling Parameter: Area 1 ft ² | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | and the second second second |
| Lead | 7.0 | 7.0 | 1.3 | |

| Sample ID: 052714-CST-W-03 | | | Collected: 05/27/2014 | |
|----------------------------|---|--------|--|----------------------|
| Lab ID: 1415080004 | Sampling Location: CST-CampMurray | | | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | Prepared: 06/04/2014 Analyzed: 06/04/2014 | |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <25 | <25 | 25 | |

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ANALYTICAL REPORT

Workorder: 34-1415080 Client Project ID: CST-CampMurray Purchase Order: 013.IH1716.27 Project Manager: Non-Responsive

Analytical Results

| Sample ID: 052714-CST-W-04 | | | | Collected: 05/27/2014 |
|----------------------------|-----------|-------------------------------|----------------|--|
| Lab ID: 1415080005 | Sampli | ng Location: CS | ST-CampMurray | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 3.8 | 3.8 | 1.3 | |

| Sample ID: 052714-CST-W-05 | | | | Collected: 05/27/2014 |
|----------------------------|-----------|-------------------------------|--|--|
| Lab ID: 1415080006 | Sampli | ng Location: CS | ST-CampMurray | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | and the second | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 47 | 47 | 1.3 | |

| Sample ID: 052714-CST-W-06 | | | | Collected: 05/27/2014 |
|----------------------------|-----------|-------------------------------|----------------|--|
| Lab ID: 1415080007 | Sampli | ng Location: CS | ST-CampMurray | Received: 05/30/2014 |
| thod: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| Sample ID: 052714-CST-W-07 | | | | Collected: 05/27/2014 |
|----------------------------|-----------|-------------------------------|----------------|--|
| Lab ID: 1415080008 | | ng Location: CS | ST-CampMurray | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| Sample ID: 052714-CST-W-08 | | | | Collected: 05/27/2014 |
|----------------------------|-----------|-------------------------------|----------------|---|
| Lab ID: 1415080009 | Sampli | ng Location: CS | ST-CampMurray | Received: 05/30/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 06/04/2014 Analyzed: 06/04/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | a second s |

Comments

Sample: 1415080004

Lead was reported from 20X dilution data for this sample because of interferences. The reporting limit was raised proportionately to the reported dilution level.



ANALYTICAL REPORT

Workorder: 34-1415080 Client Project ID: CST-CampMurray Purchase Order: 013.IH1716.27 Project Manager: Non-Responsive

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: 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.iowadnr.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.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.

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.

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|---|---|
| H 1415080 | ANALYTICAL REQUEST FORM 1. REGULAR Status RUSH Status Requested - ADDITIONAL CHARGE RESULTS REQUIRED BY DATE |
| (ALS) | CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES |
| 2. Date 5/87/14 Purchase Order No. 013 3. Company Name NES Address 1141 Sibley St. Folsom, CA 95630 Person to NON-RES Telephon | . 1H1716.27 4. Quote No. ALS Project Manage Non-Responsive 5. Sample Collection Sampling Site Sampling Site CST - Camp Murray Industrial Process Date of Collection |
| Fax Tele | Time Collected |
| E-mail A | Date of Shipment 5/28/14 |
| Billing Address (if different from above) | Chain of Custody No. |
| | 6. How did you first learn about ALS? |
| | |

7. REQUEST FOR ANALYSES

| Laboratory Use Only | Client S | Sample Number | Matrix* | Sample Volume | ANALYSES REQUESTED - Use method number if known | Units** |
|---------------------|----------|---------------|---------|---------------|---|---------|
| | 052714 | Bank | wipe | | NIOSH 7300 Lead | 10/A |
| | | -01 | | 1.42 | | 1 |
| | | -02 | | 1- | · · · · · · · · · · · · · · · · · · · | |
| | | -03 | | | | + +- |
| | | -04 | | | | |
| | | -05 | | | | |
| | | -do | 1 | | | |
| | | -07 | | | | + |
| | , | 1 -08 | 4 | 4 | Ψ | 4 |
| | | | | | | - |
| | | | | - | | 4 |
| | | | | | | 1 |
| | | | | | | |
| | | | | | | |

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

| Chain of Custo Non-Responsive | Date/Time_5/28/14 |
|----------------------------------|-------------------------|
| eceived by | Date/Time_05/30/14 0855 |
| elinquished by | Date/Time |
| eceived by | Date/Time |

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10th CST Camp Murray Personnel List

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 297 of 980 Industrial Hygiene Southwest Violation Inventory Log

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

10th Civil Support Team (CST) - Camp Murray, Washington

| TE RAC CORRECTIVE ACTIONS SUSPENSE ACTION Estimated DATE (Abatement Plan) DATE OIC/NCOIC Cost(s) CORRECTED REFERENCES | ing 6A 3 Building 6 to meet the ASHRAE Standard 62.1- recommended range. 2010 | Ing 6A 4 cabinet is tested and certified on 6.16 an annually basis | ng 6, 6A 3 Conduct a facility survey to ID & AR 420-1, 5-24b, assess extent of asbestos hazards. & implement an c, & d c, & d c, & d Plan | cliity 4 Develop and maintain a written 29 CFR 1910.38(c) & (e) training and maintain records. | clifty 4 Develop and maintain a written Hazard Communications Program onsite. Perform training and maintain records | Itdoor A Relocate the flammable 29 CFR 1910.105 (d)(4)(iv) to sheats the materials to an adequately (d)(4)(iv) | In |
|--|--|--|---|--|--|--|--|
| | | | | | | 22.104 | Inventory chemicals on-site at undate the binder to reflect |
| SITE RAC | Building 6A 3 | Building 6A 4 | Building 6, 6A 3 & 5E | Facility 4 | Facility 4 | Outdoor Storage Sheds | Outdoor |
| HAZARD DESCRIPTION | Temperature was below the ASHRAE recommended ranges. | Past due annual certification of Type 2A biological Safety B | Asbestos Building Materials: inspection, re-inspection, and Asbestos Hazard Management Plan | No Emergency Preparedness Program was available: training was not conducted. | No Hazard Communication Program was available. | Chemical storage sheds did not have ventilation Sto | Chemical inventory for the |
| CONTROL NUMBER | WACST- 05272014-4.2 | WACST- 05272014-4.6 | WACST- 05272014-5.3 | WACST- 05272014-6.1 | WACST. 05272014-6.1 & 6.2 | WACST- 05272014-7.1 | WACST- |

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 298 of 980 Industrial Hygiene Southwest Violation Inventory Log

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

10th Civil Support Team (CST) - Camp Murray, Washington

| CONTROL NUMBER | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|--------------------------|---|---------------------------|-----|--|------------------|---------------------|----------------------|-------------------|---|
| WACST- | No emergency eyewash station was present in the chemical storage/use area. | Building 6A | e | Provide an emergency eyewash station within ten (10) seconds travel from chemical storage/use areas. | | | | | ANSI Z358.1- 2009, 29 CFR 1910.151(c) |
| WACST- 05272014-7.4.1 | Electrical panels were obstructed by stored materials. | Buildings 6 and 6A | 4 | Relocate materials to allow unobstructed access to electrical panels | | | | | 29 CFR 1910.303 (g)(1)(ii) |
| WACST- 05272014-7.4.3 | Fire extinguishers were expired for monthly inspections and annual certifications | Facility | ო | Perform and document monthly inspections and annual certifications for fire extinguishers. | | | | | 29 CFR 1910.157(e)(1), 29 CFR 1910.157(e)(3) |
| WACST- | Extension cord was used as permanent wiring. | Survey Leader's Office | 4 | Relocate items to avoid using an extension cord or install outlet closer avoid using extension cords. | | | | | 29 CFR 1910.305(g)(iv)(A) |

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10th CST - Camp Murray Camp Murray, WA

LOCATION: Mobile Analytical Laboratory Suite, 10th CST Building 6A, Camp Murray, WA

DEVELOPED FROM: 5/27/2014 IHSAV - Interview

GENERAL DESCRIPTION:

CST's mission is to provide support to civil authorities at domestic chemical, biological, radiological, nuclear, and explosive (CBRNE) incidents. The mobile analytical laboratory suite is a vehicle, equipped with a two-person cab and analytical laboratory, used by CST personnel during HAZMAT response events to identify and assess CBRNE agents / substances. The laboratory is separate from the vehicle cab, located in the rear of the vehicle, and is equipped with a myriad of analytical systems designed to identify and characterize chemical and biological agents. Some of the analytical equipment includes: microscopes, gas chromatograph, hydrogen generator, negative pressure glove box, and 5-gas meter.

Upon mobilization to the site, the vehicle is parked outside of the site-specific hot zone in order to reduce risk of contamination. Field samples, which are collected and double sealed by other CST field personnel, are decontaminated prior to being handed over to the mobile analytical team. Once received, the samples are placed into the glove box, the glove box is sealed, and then the samples are processed in the sealed glove box in adherence with established procedures. Personnel reported that limited PPE is utilized during response analytical activities due to the processes being enclosed (see PPE section below).

A 5-gas meter is used during on-site analytical operations to measure ambient conditions within the lab in order to detect gas leaks from analytical equipment. The calibration and maintenance program of the 5-gas meter was not obtained during the IHSAV.

The analytical laboratory suite is serviced and maintained at the CST facility on Camp Murray for an average of one (1) hour per day in order to maintain equipment and field supplies in a response-ready state.

HAZARDS OBSERVED:

- Inhalation / dermal contact with myriad of chemical & biological hazards
- · Chemical exposure to reagents, hydrogen gas, & liquid nitrogen

PERSONAL PROTECTIVE EQUIPMENT (PPE):

- <u>Hand Protection</u>: Nitrile gloves are worn by mobile lab personnel. The glove box has rubber gloves with an additional layer of Nitrile gloves over them.
- Torso Protection: Not required
- · Eye Protection: Not required
- · Foot Protection: Not required
- · Head Protection: Not required
- · Hearing Protection: Not required
- Respiratory Protection: Not required

NOTE: analytical processes were reportedly enclosed. Additional PPE should be considered if there is a potential of splash, inhalation, or dermal contact hazards.

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BEST AVAILABLE COPY <u>IH HAZARD ASSESSMENT</u> 10th CST – Camp Murray Camp Murray, WA

ENGINEERING CONTROLS:

- 1. Negative pressure glove box equipped with double HEPA filters on exhaust, which is exhausted to the outside of the vehicle.
- 2. Pressure alarm on the glove box to alert personnel of a loss of negative pressure.

ADMINISTRATIVE CONTROLS:

- 1. PPE is inspected prior to use and replaced every few months regardless of any visible deterioration.
- 2. Response vehicles are not taken into the hot zone.

PRIMARY HAZARDOUS MATERIALS (Product Name and NIIN):

| NSN or Material ID |
|--------------------|
| |
| |
| |
| |
| |
| |

MEDICAL SURVEILLANCE REQUIRED: Annual respiratory fit testing required for personnel who use a respirator.

RECOMMENDATIONS FOR CONTROLLING EXPOSURES:

- 1. Ensure the 5-gas meter is calibrated in accordance with the Manufacturer's recommendation (typically annually) and field calibrated prior to each use.
- 2. Ensure PPE being utilized during mobile analysis is sufficient for activities conducted.

HAZARD ASSESSMENT EVALUATIONS:

- Date of Last Assessment: May 27, 2014
- Date anticipated for next evaluation (annual if required): May 2015

INDIVIDUAL PREPARING THIS ASSESSMENT:



5/27/2014 Preparation Date

(916) 353-2360

Contact Phone Number

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NES 1141 Sibley Street, Folsom, CA 95630

Contact Address

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10th CST – Camp Murray Camp Murray, WA

Occupational Health:

| Print Name | Signature | Review Date |
|---------------|--------------------|--|
| Safety: | | |
| Print Name | Signature | Review Date |
| SUPERVISOR: | | |
| Print Name | Signature | Review Date |
| Employee Name | Employee Signature | Date |
| | | and the second s |
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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 the 10th Civil Support Team facility. 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 4.0 Sampling Results, Item 2 – Indoor Air Quality).

N4.2 Indoor Air Quality – Adjust the temperature throughout Building 6 to meet the ASHRAE recommended range of 68-75°F.

N4.3 Carbon Monoxide (CO) – Conduct additional evaluation of CO inside Building 6A and 5E to ensure appropriate controls are implemented.

N4.6 Biological Safety Cabinet – Ensure the biological safety cabinet, located at the west end of Building 6A, is tested and certified on an annual basis.

N5.1 HVAC Systems – Site personnel reported that temperatures inside Building 5E are cold during winter months. Evaluate temperatures within Building 5E during winter months.

N5.3 Asbestos Management – Conduct a facility survey to identify and assess extent of asbestos hazards. Implement an Asbestos Hazard Management Plan if asbestos is found to be present within the facility.

N6.1 Safety Training and Record Keeping - Develop and implement written site specific Emergency Preparedness Program and Hazard Communications Program.

N6.2 Safety Training and Record Keeping – Perform and document training for the facility's Emergency Preparedness Program.

N6.3.1 Mobile Analytical Laboratory Suite – Ensure the 5-gas meter is calibrated in accordance with the Manufacturer's recommendation (typically annually) and field calibrated

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prior to each use. Ensure PPE being utilized during mobile analysis is sufficient for activities conducted.

N6.4 Work Processes – Conduct detailed hazard assessments of other work processes that are conducted at the CST facilities on those that could potentially be performed in the field.

N7.1 Hazardous Materials Storage – The chemical storage sheds located behind Building 6A contain flammable materials that are not adequately ventilated. Relocate the flammable materials to an appropriate storage area with ventilation to allow the removal of flammable vapors or provide sufficient ventilation to existing storage areas. The storage sheds were not included in the facility's chemical inventory. Update the chemical inventory to include these stored materials. There was no emergency eyewash station provided in the chemical storage/use area in Building 6A. Emergency eyewash stations must be provided within ten (10) seconds of unobstructed travel from areas where chemicals are handled.

N7.4 Safety Walk-Through

- 1. Electrical panels in Buildings 6 and 6A were obstructed by stored materials. Relocate stored materials to allow unobstructed access to electrical panels.
- 2. Conduct a workplace ergonomics evaluation and maintain documentation onsite.
- Fire extinguishers throughout the facility were expired for monthly and annual inspections. Perform and document monthly and annual inspections for all fire extinguishers.
- The fire extinguisher in the Building 6 classroom had visible signs of rusting and should be replaced.
- 5. The extension cord connected to the television in the Survey Leader's office should not be used as permanent wiring. Consider relocating the television to avoid using an extension cord or installing an outlet closer to the television so it can be plugged directly into the wall.
- The rusted metal drums stored behind Building 6A were reportedly used for training exercises. Ensure the drums are clearly labeled as "empty" and for "training" use.
- 7. Properly cap or remove loose wires along the western wall in Building 6A.

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| FY 14 | FY 14 Installation Status Report (ISR) Services Documentation | Intellicode | Q1 | ď | 43 | U(4 Annual |
|--|---|-------------|-----|-----|-----|------------|
| | Number of processes that were assessed for potential inhalation exposure to employees within the last 12 months. | 953-02-14 | IHT | THI | IHT | THI |
| d to NG | Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months. | 953-02-14 | IHT | IHT | IHT | IHT |
| | Number of personnel who were reassessed by industrial hygiene within the last 12 months. | 953-02-15 | THI | IHT | THI | THI |
| of the local division in which | | 953-02-15 | THI | THI | HT | THI |
| A COLUMN TWO IS NOT THE OWNER. | 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 | IHT | THI | IHT |
| a be made as a second second | 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 | IHT | THI | THI |
| Numt to qua | 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 | IHT | IHT | IHT |
| and the second se | Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months. | 953-02-17 | IHT | IHT | 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 | | | - | |
| ABLE | Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require inspection and measurement of airflow rates | 953-02-18 | | | - | |
| | Number of ventilation systems which require corrective action based on deficiencies identified during an IH survey | 953-02-19 | | | 0 | |
| Num | Number of ventilation systems which were evaluated by an IH | 953-02-19 | | | - | |
| Num | Number of design review packages evaluated and addressed by an IH with recommendations applicable to occupational health concerns | 953-02-20 | IHT | THI | IHT | IHT |
| Num | Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns | 953-02-20 | IHT | IHT | IHT | IHT |

10th CST Camp Murray, WA

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| | | | Fa | acility | Infor | ILABLE COPY mation For ember 4, 2013 | m | | |
|-------------------|--------------------------------------|--------------|-----------|-------------|---------|--|------------------|----------------------|---------|
| General Facility | COLUMN TRANSPORTED AND A CARDINE AND | 19791 | | - C | ate(s) | of Previous IHSAV | s: 2011 - | unavailable | |
| IH(s): NO | 1-Re | spon | sive | | <u></u> | Date(s) of IHS | AV: 27 May | y 2014 | |
| Facility Name: | | Support To | | 141 | | | | | |
| Address: | Building | s 6, 6A, and | 5E, Ca | mp Murray | , Wash | ington | | | |
| Facility Comman | der: | Non-F | Resp | ponsi | ve | | | | |
| Safety Officer: | ĺ | Non- | Re | spo | nsi | Name / Phone Num | | | |
| No Person(s): | 22 | Admin: | 22 | Maint: | 0 | Work Sched: | M-F 0900-1700 | Size of Facility: | Unknown |
| (Include status - | AGR, Fed, | Tech., IDR | , State o | or Contract | Employ | vee) | None | | |

| Unit(s): | 10 051 | CO-Tenani(3). | TTOTIC | | |
|-------------------------------|--|----------------|-------------|----------|--|
| | Include UIC if available | | | List All | |
| Primary work activities at | | | | | |
| Facility: | Administrative support, training, operations | response, hazm | at response | | |

Written Health & Safety Programs / SOPs

| Program | Program Needed | Have Program | Date of Last Training | # Enrolled | Comments |
|------------------------|-------------------|-----------------|--------------------------|---------------|--|
| Confined Space | No | No | N/A | | Training conducted upon hire |
| Emergency Preparedness | Yes | No | N/A | 4 | Building Manager Handbook needed |
| Hazard Communication | Yes | No | January 2014 | | Hazmat technician training covers Hazcom, training performed annually |
| Hearing Conservation | No | No | N/A | | |
| PPE | Yes | Yes | January 2014 | | |
| Respiratory Protection | Yes | Yes | January 2014 | | |

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

NA Previous IH reports

NA = Not Applicable to this site

x Hazardous Materials inventory
 x Personnel list

Others (List):

Non - DoD Contractors

| Service | Provider | Service | Provider |
|-----------------------|--|-------------------|----------|
| Oil / Water Separator | N/A | Laundry | N/A |
| Tools | N/A | Pest Control | N/A |
| Rags | N/A | Hazardous Waste | N/A |
| Refuse | N/A | Crane Maintenance | N/A |
| Others: | Biological Safety Cabinet - Contractors | | |

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 307 of 980

BEST AVAILABLE COPY 10th CST Camp Murray, WA Equipment List

| | | Newsystem | 044 |
|--------|---------------|--|-------------|
| LIN | NSN | Nomenclature | Qty |
| | | TRAILER CARGO: HERITAGE 7 X 16TA HORTON | 1 |
| | | COMPUTER DIGITAL | 2 |
| | | MONITOR, COLOR IMPE: S2340M DELL | 1 |
| | | CAMERA, DIGITAL: PSA630 CANON | 1 |
| C05002 | | TRANSFER UNIT, CRYPT | 3 |
| | | GAMMA SPECTROMETER: 112600-USB THERMO EL | 3 |
| | | DETECTOR KIT UNIVERSAL TESTING, WITH ACC | 25 |
| | | DETECTOR, RADIAC | 25 |
| J00697 | | DETECTOR CHEMICAL A | 5 1 |
| | | JCKT CLD WTR M-R | 1 |
| | | OXIMETER PULSE: RAD-57 MASIMO | 1 2 1 |
| NA3005 | 3920015086625 | CART, GENERAL HAULIN | 2 |
| | | KIT, AIRWAY: 53688 RESCUE MEDICAL DIV MO | 3 |
| R12379 | 1095012362203 | RACK STOR SMALL ARMS | 3 |
| WF406E | 834001C043048 | TENT COMMAND MULTI-PURPOSE SHELTER: TVI | 1 |
| | 232001C160497 | TRUCK CARGO PICKUP: CST-AD/LOG FORD | 1 |
| | | PAPER SHREDDING MACHINE, ELECTRIC M: WHI | 1 |
| | 702101C916107 | LAPTOP, COMPUTER | 1 |
| 92516N | 351001C061014 | DRYER TUMBLER LAUNDRY, COMMERCIAL E: GEW | 1 |
| 95152N | 691001C049727 | MANIKIN, CPR HEAD AND TORSO: 37142 RESUS | 4 |
| C05701 | 6665013578502 | IMPROVED CHEM AGT MON | 4 |
| FG6507 | 666501X001496 | DETECTOR KIT MULTI-GAS: MULTIRAE PRO/PLU | - 1 |
| HA3008 | 423001C115205 | LIGHTWEIGHT INFLATABLE DECONTAMINAT: LID | 8 |
| HA4058 | 424001C025582 | PERSONNEL PROTECTIVE EQUIPMENT LEVE:4240 | 12 |
| HA4087 | 424001C025581 | PERSONNEL PROTECTIVE EQUIPMENT LEVE:4240 | |
| NA156G | 651501C025597 | OTOSCOPE OPTHALMOSCOPE: 97100 WELCH ALLY | 1 |
| NA159X | 651501C041343 | NEUBLIZER: OMRON-MICROAIR NE-U03V | - |
| P28723 | 6130014386960 | POWER SUPPLY CAAA M28 | 5 1 |
| T28688 | 5180014830249 | TOOL KIT: GEN MECHAN | 1 |
| | | VAN UNIFIED COMMAND SUITE COMMO: GMC6500 | 1 |
| YF3097 | | VEHICLE, MOTOR, PASSENGER: E450 FORD | 1 |
| 70210N | 7021015804491 | COMPUTER, DIGITAL | 22 |
| FA2008 | 5820015457946 | RECEIVER-TRANSMITTER, RADIO | 15 |
| M12418 | 4240015262164 | MASK, CHEMICAL-BIOLO | 13 |
| M60449 | 6625012656000 | MULT DIGIT AN/PSM-45A | 1 |
| MC8003 | 5180014249186 | TOOL KIT, PERSONAL C | 4 |
| NA1554 | 6515016059429 | DEFIBRILLATOR/MONITOR-RECORDER S | 2 |
| NA3012 | 6530014521651 | LITTER EVACUATION | |
| T62350 | 4240013658241 | TEST KIT MASK PRO M41 | 1 5 1 |
| 70223N | 702501C018216 | MONITOR, COLOR IMPE: 740N SAMSUNG | 1 |
| 70236N | 702501C913923 | LASER PRINTER | 1 |
| 70236N | 7435015760211 | INFORMATION CENTER, OFFICE | 1 |
| 90890N | 667001C061797 | BALANCE ANALYTICAL, DIGITAL READOUT: 210 | 7 |
| FB982Q | 5998015130864 | SECURITY MODULE | 1 |
| FG3004 | 663001C174489 | GAS CHROMATOGRAPH MASS SPECTROMETER: HAP | 1 3 1 |
| FG650J | 666501C050682 | RADIATION MONITOR: MCB2 CANBERRA | 1 |
| FG657X | 666501X403534 | DETECTOR RADIAC: ORTEC HX | 1 |
| HA4004 | 4310014651509 | COMPRESSOR UNIT, RECIPROCATING | 1 |
| J21883 | 8415015386747 | JCKT CLD WTR L-R DEFIBRILLATOR EXTERNAL AUTOMATIC: LIFEPA | 2 |
| NA1507 | 6515010058601 | DEFIDRILLATOR EXTERINAL AUTOWATIO. LI LI A | |

10th CST

Camp Murray, WA Equipment List

| | | Equipment List | |
|--------|------------------|--|-------------|
| | | DEFIBRILLATOR EXTER | 1 |
| | | ECG MACHINE: LIFEPAK VLP12 | 1 |
| NA155J | 651501C025596 | OXYGEN DELIVERY: 51964 RESCUE MEDICAL DI | 1 |
| NA454E | 654501C064684 | TRAUMA KIT: 640-047LS LAB SAFTEY SUPPLY | 2 |
| R45766 | 5820014963523 | RECEIVER-TRANSMIT, RAD | 1 |
| S05001 | 5810014596441 | TELEPHONE, SECURE UN | 1 |
| WF4549 | 834501F002050 | GUIDON: 10TH CST US FLAG AND SIGNAL CO., | 1 |
| YF100X | 231001C095215 | VEHICLE, MOTOR, PASSENGER: ADVON WMD-CS | 1 |
| YF2020 | 232001C160593 | TRUCK CARGO PICKUP: FORD F450 (CST) FORD | 2 |
| YF204H | 232001C025569 | VEHICLE ANALYTICAL LABORATORY SYSTE: GMC | 1 |
| | | COMPUTER SYSTEM, DIG | 5 |
| | | COMPUTER, MICRO LAP-TOP PORTABLE AC: HST | 9 |
| 94409N | | ICE MAKING MACHINE, 300 LB PER 24 HRS: Q | 1 |
| | | COMP SY AN/UYQ-90(V)2 | 1 |
| | | KIV 7HSB NETWORK | 2 |
| E63728 | | COMPAS MAGNETIC UNMTD | 4 |
| FA0510 | 580501C070154 | TELEPHONE SATELLITE: SATELITE SERIES 950 | 6 |
| FA2502 | | RECEIVER-TRANSMITTER, RADIO | 2 |
| | 6650009736945 | | 1 |
| FG509C | 6650010061779 | GAMMA SPECTROMETER: DETECTIVE - EX ORTEC | 1 |
| FG650L | 6665010025602 | DETECTION SYSTEM, BIOLOGICAL: BT-650 MES | 2 |
| FC6552 | 6665010025605 | SAMPLE COLLECTION KIT - LIVE: QSA102 QUI | 2 2 |
| | | DETECTOR,GAS | 3 |
| P98152 | 1005011182640 | PISTOL 9MM AUTOMATIC | 22 |
| P30132 | 6665012221425 | RADIAC SET AN/VDR-2 | |
| R20004 | 3895004988343 | REELING MACH CA RL-39 | 2 |
| R09100 | 4110010061015 | REFRIG MECH 60CY 1PH: CTX18DABQRWW GENER | 1 |
| VERAL | 233001C025572 | TRAILER, TOC TANDEM AXLE: CT507 PROTEUS | 1 |
| 09064N | 2330010020012 | TRAILER: GENERAL PURPOSE: EW1624 WELLS C | 1 |
| 11160N | 2340010133435 | VEHICLE ALL TERRAIN: RANGER 800 CREW AT- | 3 |
| 70231N | 7025015605739 | PRINTER, AUTOMATIC DATA PROCESSIN | 1 |
| 04160M | | HEATER: 97-N-0030 TVI CORP | 3 |
| | | CO SYS AN/TYQ-109(V)1 | 1 |
| C2//0/ | 5905010014720107 | BLACKBERRY: BOLD 9930 NC | 22 |
| FA0595 | 5000015185183 | RECEIVER-TRANSMITTER, RADIO | 4 |
| FA2000 | 6115010020801 | GENERATOR DIESEL: PRO6000 ONAN POWER INC | 2 |
| FD1500 | 665001C925798 | RAID-M-100 | 2 |
| FG501A | | SPECTROMETER: TRUDEFENDER FT S2 AHURA SC | 1 |
| | | COMPUTER-INDICATOR, RADIAC | 1 |
| FG65A0 | | MASK,CHEMICAL-BIOLO | 4 |
| | | MASK, CHEMICAL-BIOLO | |
| M12418 | 4240015205255 | TRAILER, TANDEM AXLE CARGO: CS716TA3 PAC | 1 |
| YF307R | 233001C166891 | | 3 1 1 |
| 09064N | 2330010100001 | RADIO 2 WAY VOICE ACTIVATED 1/2 MIL: XTS | 3 |
| 70169N | | | 1 |
| 70223N | 702501C015125 | ALARM UNIT ALARM M42 | 14 |
| A33120 | | CTG 9MM BALL NATO | 1,000 |
| C39136 | | PRESSURE TEST KIT: AKMOB KAPPLER | 1 |
| DA1514 | | | 8 |
| FG5000 | 1240014306942 | BINOCULAR M24 SPECTROMETER: GAS ID SMITHS DETECTION | 1 |
| FG501A | 666504 X003037 | SAMPLING SYSTEM, AIR: IBAC ICX TECHNOLOG | 1 |
| FG6525 | 000501X003077 | SAMPLE COLLECTION KIT, TRAINING: QSA102T | 2 |
| FG652C | 0000010020000 | SAMPLE COLLECTION OF THE HOUSE CONTRACT | 100 |

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10th CST Camp Murray, WA

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|----------------|---------------|--|
| and the second | | COLORMETRIC TUBE COMBINED KIT HAZMA:4056 |
| FG653N | 666501C025607 | |
| FG807M | 6665015586317 | DETECTOR, CHEMICAL AGENT |
| FG8559 | 668501C061783 | STATION, WEATHE: WEATHERPAK-400TRX COAST |
| FJ2152 | 7021015085716 | COMPUTER, DIGITAL |
| FK9008 | 749001C029862 | SHREDDER PAPER, ASSORTED: 75X GBC SHREDM |
| NA1509 | 6515014583831 | DEFIBRILLATOR/MONITOR |
| NA1527 | 6515014660971 | OXIMETER PULSE FINGER |
| NA1562 | 651501C025592 | SPIROMETER: 01301-500 WELCH ALLYN SCHILL |
| NA159V | 651501C042298 | MONITOR HEAT STRESS: QUEST TEMP 15 P/N 6 |
| NA454N | 654501C025599 | MEDICAL KIT: N/A SPECALITY DEFENSE SYSTE |
| 92116N | 672001C044459 | CAMERA, DIGITAL: CANON SD630 6 MEGAPIXEL |
| 98572N | 834001C057975 | SHELTER PORTABLE, ALL WEATHER WATERPROOF |
| 98572N | 834001C111470 | SHELTER PORTABLE, ALL WEATHER WATER: SCL |
| 98807N | 773001C142901 | TELEVISION RECEIVER HOME TYPE, W/AN: LN5 |
| 99810N | 351001C061005 | WASHING SYSTEM LAUNDRY AUTOMATED VARIOUS |
| C78851 | 7010014760934 | COMP SY AN/UYQ-90(V)3 |
| FG3002 | 663001C111445 | ANALYZER CHEMICAL INSTRUMENT: PR2 MODEL |
| FG306U | 663001C155330 | AIR SAMPLER: 9000-165-000-02 RESEARCH IN |
| FG6526 | 666501C139431 | IDENTIFINDER-NG: IDF-UL-LGH ICX TECHNOLO |
| FG653Z | 666501D181467 | RECONAISSANCE SYS NBC: WMD-CST-DRC-LT JP |
| FG6558 | 6665015214676 | ANALYZER HAZARD MAT |
| FH2062 | 671001C109891 | CAMCORDER, DIGITAL VIDEO: DCR-DVD810 SON |
| HA2096 | 422001C025583 | PUMP OXYGEN TRANSFER: DOB-M/DOB/T DRAEGE |
| J21883 | 8415015386752 | JKT CLD WTHR L-L |
| R30993 | 6665013476100 | RADIAC ST AN/PDR-77() |
| R31061 | 6665014071237 | RADIAC ST AN/UDR-13 |
| SA1005 | 411001C061017 | FREEZER: FUF 20DADRWH GENERAL ELECTRIC |
| YF209U | 232001C025570 | MEDICAL RECOVERY VEHICLE: 213.1 WHEELED |
| | | |

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BEST AVAILABLE COPY Facility Information Form Revised: December 4, 2013



| General Facility | State state state | (1999) | | | Date(s) | of Previous IHSAVs: | None - | No Records | | |
|----------------------------|---------------------------------------|---------------|------------|--------------|---------|---------------------|------------------|-------------------|-----------------|--|
| IH(s): NO | n-Re | espons | sive | | | Date(s) of IHSA | V: May 19 | May 19, 2014 | | |
| Facility Name: | Custo | mer Service (| Center | | | | | | | |
| Address: | Buildi | ng 15, Camp | Murray, | Tacoma, V | VA 984 | 30 | | | | |
| Facility Comm | ander: | | No | n-Re | spo | nsive | | | | |
| | | | | | | Name / Phone Number | er / email | | | |
| Safety Officer: | | None Pro | vided | | | | | | | |
| | | | | | | Name / Phone Number | er / email | | | |
| No Person(s): | 30 | Admin: | 30 | Maint: | 0 | Work Sched: | M-F 0800-1630 | Size of Facility: | Not provided | |
| (Include status - | AGR, Fe | d, Tech., IDR | , State of | or Contract | Employ | yee) | | - | | |
| Unit(s): | | Not On | e Spec | ific Unit | | Co-Tenant(s): | Not One S | Specific Unit | | |
| | | Include | UIC if a | vailable | | | | List All | | |
| Primary work | Admi | nistrative Qu | ality C | ontrol for t | he Sta | te | | | | |
| activities at Facility: | una lu - | | | | | | | | | |
| | | | | | | | | | | |

Written Health & Safety Programs / SOPs

| Program | Program Needed | Have Program | Date of Last Training | # Enrolled | Comments |
|------------------------|-------------------|-----------------|--------------------------|---------------|----------|
| Confined Space | NA | NA | NA | NA | |
| Emergency Preparedness | Y | Y | Unknown | | |
| Hazard Communication | Y | Y | Unknown | | |
| Hearing Conservation | NA | NA | NA | NA | |
| PPE | NA | NA | NA | NA | 11 1221 |
| Respiratory Protection | NA | NA | NA | NA | |

Y = Yes N = No NA = Not Applicable to this site

Documents / Records to Obtain

| X | Facility floor plan / evacuation map | × | Hazardous Materials inventory |
|---------|---|---|-------------------------------|
| NA | List of equipment serviced / maintained | X | Personnel list |
| NA | Previous IH reports | | Others (List): |
| N | IA = Not Applicable to this site | | |
| Non – D | oD Contractors | | |

| Service | Provider | Service | Provider | |
|-----------------------|----------|-------------------|----------|--|
| Oil / Water Separator | NONE | Laundry | NONE | |
| Tools | NONE | Pest Control | NONE | |
| Rags | NONE | Hazardous Waste | NONE | |
| Refuse | NONE | Crane Maintenance | NONE | |
| Others: | | | | |

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) | No drill floor but lead wipe samples 051914-W-15-01 to 05 collected throughout facility. |
|--|---|
| 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, lead wipe samples 051914-W-15-01 to 05 collected throughout facility. |
| 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. | Suspect ACM include: ceiling tiles, base cove mastic, drywall and mud, wood panel mastic, and vinyl floor tiles. Materials were in good condition. No bulk samples were collected. |
| Quality of housekeeping | Very good, some dirt on supply/return diffusers. |
| HVAC maintenance plan in place? | Yes, building maintenance SOP. |
| Overall condition of HVAC system | HVAC system evaluated, some areas do not meet regulated requirements, see Section 4.2 & 5.1 of Report. |
| Obtained CO2, Temp, RH monitoring | See IAQ Measurements in Appendix E |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | No Hazmat inventory and/or MSDS available. |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | No flammable materials or POLs were stored at this facility. |
| | |

| Fire alarm in working conditionnot usually in place in older armories | NA |
|--|---|
| Fire extinguishers in place and properly identified and mounted | Yes |
| Evidence of monthly fire extinguisher inspections | No |
| Annual fire extinguisher inspections tags current | No |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | NA |
| 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) | Hazcom, and Emergency Preparedness programs in place, no records of training available. |
| Any Photo labs | No |
| Any hazardous noise sources | No |
| Light levels checked throughout building | See Illumination Survey in Appendix E |
| Breaker panels properly labeled with no exposed wiring | Yes |
| Check building occupancy | 1.30 |
| How many military personnel, how many civilian personnel What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | 2. Administrative- Quality Control |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | None |
| Obtain two lead air samples | On IHSW Request Only |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | NA |
|--|--|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | NA |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Completed, see report for details |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Completed, see Photo Log in Appendix C |
| Name of Armory, POC , phone #, address and organizations in Armory | Building 15, DCPER Non-Responsive |
| (Add Checklist to Report) | Camp Murray Tacoma, WA |

BEST AVAILABLE COPY IAQ MEASUREMENTS BUILDING 15 CAMP MURRAY, WA MAY 19, 2014

| Location | CO ₂ max permissible level 1,201 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO Max permissible 200 ppm STEL |
|------------------------------|---|---|------------------------------------|---------------------------------------|
| Desk Near Conference Room | 783 | 71.3 | <mark>3</mark> 9.9 | 1.4 |
| SBIC Chief Desk | 788 | 71.5 | 39.4 | 1.4 |
| Education Tech | 807 | 71.5 | 39.5 | 1.5 |
| Desk Table Near Files | 786 | 71.6 | 39.3 | 1.3 |
| GMIS Clerks Desk | 788 | 71.5 | 39.4 | 1.4 |
| Retirement Clerk Desk | 803 | 72.6 | 39.7 | 1.5 |
| Kitchen | 787 | 73.4 | 41.8 | 1.3 |
| Cubicles Near Kitchen | 733 | 74.0 | 41.3 | 1.5 |
| Enlisted Promotions Desk | 721 | 74.4 | 40.9 | 1.4 |
| Promotion Sargent's Desk | 706 | 74.3 | 40.6 | 1.5 |
| G1 Office | 658 | 74.4 | 40.7 | 1.4 |
| Waiting Area | 695 | 74.5 | 40.6 | 1.4 |
| ID Office | 675 | 74.5 | 40.4 | 1.8 |
| Conference Room | 692 | 75.2 | 41.0 | 1.5 |
| Archives Clerk Desk | 724 | 75.1 | 40.6 | 1.9 |
| Office Branch NCO Desk | 739 | 75.2 | 40.4 | 1.5 |
| ID Card Office | 682 | 75.1 | 40.0 | 1.4 |
| OPM Tech | 755 | 75.8 | 39.7 | 1.5 |
| Outdoor Control | 474 | 70.6 | 32.9 | 1.3 |
| | | | | |

BOLD = Outside of permissible range

CO₂ = Carbon Dioxide CO = Carbon Monoxide

°F = Fahrenheit

RH = Relative Humidity

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BEST AVAILABLE COPY ILLUMINATION SURVEY BUILDING 15 CAMP MURRAY, WA MAY 19, 2014

| Room | Location | Light Measurement (FC) | Minimum Lighting Requirement (FC) | |
|------------------------------|----------------------------------|---------------------------|--------------------------------------|--|
| Desk Near Conference Room | Desk Top | 43.8 | ≥ 50 | |
| SBIC Chief Desk | Desktop | 86.6 | ≥ 50 | |
| Education Tech | Desktop | 20.7 | ≥ 50 | |
| Desk Table Near Files | Desktop | Desktop 83.3 | | |
| GMIS Clerks Desk | Desktop | Desktop 48.0 | | |
| Retirement Clerk Desk | Desktop | 38.0 | ≥ 50 | |
| Kitchen | Center of Room | 51.8 | ≥ 30 | |
| Cubicles Near Kitchen | Desk Top | 22.8 | ≥ 50 | |
| Enlisted Promotions Desk | Desktop | 37.2 | ≥ 50 | |
| Promotion Sargent's Desk | Desktop | 49.8 | ≥ 50 | |
| G1 Office | G1 Office Desktop 47 | | ≥ 50 | |
| Waiting Area | Waiting Area Center of Room 65.5 | | ≥ 10 | |
| ID Office | Desktop | 38.8 | ≥ 50 | |
| Conference Room | Tabletop | 67.5 | ≥ 50 | |
| Archives Clerk | Desktop | 46.6 | ≥ 50 | |
| Office Branch NCO | Desktop | 53.5 | ≥ 50 | |
| ID Card Office | Desktop | 39.9 | ≥ 50 | |
| OPM Tech | Center of Room | 45.3 | ≥ 10 | |

*FC = foot candle measurement

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| Model:_Unknown | | | Serial Number: Unknown | |
|--------------------|-----|---|------------------------|--|
| Dimensions of LEV: | 24" | x | 24" | |

| 515 | 392 | 189 |
|-----|-----|-----|
| 347 | 422 | 525 |
| 265 | 337 | 362 |

Average Velocity = 372 fpm NOTES:

Air temperature coming from the AHU: 74.6°F

Name of LEV System: Air Handling Unit 1, Supply 2 (Second Closest to AHU)

| Model: Unknown | | | | Serial Number: Unknown |
|--------------------|-------|---|-----|------------------------|
| Dimensions of LEV: | 24" x | : | 24" | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 78 | 20 | 29 |
|-----|-----|----|
| 106 | 31 | 38 |
| 92 | 121 | 52 |

Average Velocity = 63 fpm NOTES:

Air temperature coming from the AHU: 75.5°F

Name of LEV System: Air Handling Unit 1, Supply 3 (Second Farthest from AHU

Model: Unknown

Serial Number: Unknown

Dimensions of LEV: 24" x 24"

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 43 | 161 | 53 |
|-----|-----|----|
| 134 | 57 | 34 |
| 23 | 52 | 59 |

Average Velocity = 68 fpm NOTES:

Air temperature coming from the AHU: 75.2°F

Name of LEV System: Air Handling Unit 1, Supply 4 (Farthest from AHU)

| Model: Unknown | | | | Serial Number: Unknown |
|--------------------|-----|---|-----|------------------------|
| Dimensions of LEV: | 24" | × | 24" | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 105 | 555 | 655 |
|-----|-----|-----|
| 327 | 179 | 93 |
| 194 | 462 | 447 |

Average Velocity = 335 fpm NOTES:

Air temperature coming from the AHU: 74.8°F

| Model: Unkno | own | | | | Serial Number: Unknown |
|----------------|----------------|-----------|--------|------------|---------------------------------|
| Dimensions of | of LEV: | 24" | × | 24" | |
| Sketch of vent | tilation measu | rement gr | rid; a | II measure | ements in feet per minute (fpm) |
| 605 | 670 | 54 | 5 | | |

| 605 | 670 | 545 |
|-----|-----|-----|
| 755 | 725 | 780 |
| 610 | 725 | 790 |

Name of LEV System: Air Handling Unit 2, Supply 1 (Nearest AHU)

Average Velocity = 689 fpm NOTES:

Air temperature coming from the AHU: 72.5°F

Name of LEV System: Air Handling Unit 2, Supply 2 (Second Closest to AHU)

| Model: Unknown | | | Serial Number: Unknown | _ |
|--------------------|-------|-----|------------------------|---|
| Dimensions of LEV: | 24" x | 24" | | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 325 | 710 | 1060 |
|-----|-----|------|
| 475 | 380 | 1380 |
| 372 | 340 | 970 |

Average Velocity = 668 fpm NOTES:

Air temperature coming from the AHU: 72.4°F

 Name of LEV System: Air Handling Unit 2, Supply 3 (Second Farthest from AHU

 Model: Unknown
 Serial Number: Unknown

 Dimensions of LEV:
 24" x 24"

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 415 | 93 | 420 | |
|-----|-----|-----|--|
| 173 | 144 | 580 | |
| 164 | 110 | 380 | |

Average Velocity = 275 fpm NOTES:

Air temperature coming from the AHU: 72.2°F

Name of LEV System: Air Handling Unit 2, Supply 4 (Farthest from AHU)

| Model: Unknown | | | | Serial Number: Unknown |
|--------------------|-----|---|-----|------------------------|
| Dimensions of LEV: | 24" | х | 24" | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 605 | 262 | 259 |
|-----|-----|-----|
| 545 | 331 | 163 |
| 192 | 269 | 177 |

Average Velocity = 331 fpm NOTES:

Air temperature coming from the AHU: 73.1°F

Name of LEV System: Air Handling Unit 3, Supply 1 (Nearest AHU)

Model: Unknown

Serial Number: Unknown

Dimensions of LEV: 24" x 24"

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 406 | 610 | 555 |
|-----|-----|-----|
| 550 | 342 | 640 |
| 490 | 570 | 715 |

Average Velocity = 542 fpm NOTES:

Air temperature coming from the AHU: 75.4°F

Name of LEV System: Air Handling Unit 3, Supply 2 (Second Closest to AHU)

| Model: Unknown | | | | Serial Number: Unknown | |
|--------------------|-----|---|-----|------------------------|--|
| Dimensions of LEV: | 24" | x | 24" | | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 425 | 271 | 143 |
|-----|-----|-----|
| 275 | 322 | 275 |
| 585 | 770 | 492 |

Average Velocity = 395 fpm NOTES:

Air temperature coming from the AHU: 74.9°F

Name of LEV System: Air Handling Unit 3, Supply 3 (Second Farthest from AHU

Model: Unknown

Serial Number: Unknown

Dimensions of LEV: 24" x 24"

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 595 | 194 | 406 | | |
|-----|-----|-----|--|--|
| 226 | 202 | 150 | | |
| 102 | 180 | 155 | | |

Average Velocity = 246 fpm NOTES:

Air temperature coming from the AHU: 75.3°F

Name of LEV System: Air Handling Unit 3, Supply 4 (Farthest from AHU)

| Model: Unknown | | | | Serial Number: Unknown |
|--------------------|-----|---|-----|------------------------|
| Dimensions of LEV: | 24" | × | 24" | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 180 | 150 | 230 | | |
|-----|-----|-----|--|--|
| 260 | 209 | 275 | | |
| 231 | 196 | 131 | | |

Average Velocity = 207 fpm NOTES:

Air temperature coming from the AHU: 75.5°F

Name of LEV System: Air Handling Unit 4, Supply 1 (Nearest AHU)

Model: Unknown

Serial Number: Unknown

Dimensions of LEV: 24" x 24"

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 124 | 103 | 148 |
|-----|-----|-----|
| 560 | 250 | 251 |
| 445 | 176 | 131 |

Average Velocity = 243 fpm NOTES:

Air temperature coming from the AHU: 60.7°F

Name of LEV System: Air Handling Unit 4, Supply 2 (Second Closest to AHU)

| Model: Unknown | | | | Serial Number: Unknown |
|--------------------|-----|---|-----|------------------------|
| Dimensions of LEV: | 24" | × | 24" | |

Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 267 | 240 | 103 |
|-----|-----|-----|
| 236 | 119 | 102 |
| 148 | 77 | 139 |

Average Velocity = 159 fpm NOTES:

Air temperature coming from the AHU: 62.4°F

 Name of LEV System: Air Handling Unit 4, Supply 3 (Second Farthest from AHU

 Model: Unknown
 Serial Number: Unknown

 Dimensions of LEV:
 24" x 24"

 Sketch of ventilation measurement grid; all measurements in feet per minute (fpm)

| 169 | 298 | 100 | |
|-----|-----|-----|--|
| 165 | 545 | 76 | |
| 271 | 74 | 74 | |

Average Velocity = 197 fpm NOTES:

Air temperature coming from the AHU: 64.1°F

Name of LEV System: Air Handling Unit 4, Supply 4 (Farthest from AHU)

| Model: Unknown | | | | Serial Number: Unknown |
|-------------------------------|------------|--------|-----------|---------------------------------|
| Dimensions of LEV: | 24" | x | 24" | |
| Sketch of ventilation measure | urement gr | rid; a | II measur | ements in feet per minute (fpm) |

| 241 | 1130 | 261 | | |
|-----|------|-----|--|--|
| 130 | 203 | 99 | | |
| 185 | 299 | 73 | | |

Average Velocity = 291 fpm NOTES:

Air temperature coming from the AHU: 62.7°F

| NES- | | | BEST AVAILAB ty Informa evised: Decemb | ation Form | 2 | | |
|---|-------------------------|--------------------|--|---|---|---------------------------|---------------------|
| General FaciNon-R IH(s): Facility Name. | espons | | | of Previous IHSA Date(s) of IHS/ Camp Mu | 1 | Contraction of the second | |
| Address: Facility Commander | lor | ז-F | Res | pol | nsi | ve | |
| Safety Officer: | 2000C - | 007 | A SWALE | UNIT | | | |
| No Person(s): <u>30</u> (Include status –AGR, Fed, Unit(s): | Admin: Tech., IDR, S | tate or Conti | nt: Wo ract Employee) | rk Sched: <u>μ-F</u> : <u>Caut; vc</u> List | 8.430 Size | | |
| Primary work | ~ <u>0</u> C | for s | tete | | | | None add-on 2,00 |
| Vritten Health & Safety I | Programs / | SOPe | has a | Facility | 902 | | |
| Program | Program Needed | Have Program | Date of Last Training | | 1101-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1- | Comments | (THE STATE |
| Confined Space | ~~ | 2- | 2-2 | -2- | - | | |
| Emergency Preparedness | ix+ 2007 | YLS | (un man |) | | | |
| Hazard Communication | OCT 2007 | Yes | automin | | | | |
| Hearing Conservation | -2-2 | ~ | 2-2- | 2 | | | |
| PPE | 2 | 2 | -2- | | | | |
| Respiratory Protection | ~ | | -2 | | | | |
| Others (Bloodborne Pathogens, L | .ock Out / Tag Ou | It, Lifting Device | s, Radiation, SOPs, | etc.) – List on bac | k | | |
| Y = Yes N = No N/ | | | | | | | |
| ocuments / Records to | Obtain | | | | | | |
| Facility floor plan / e | evacuation ma | ар | | Hazardous Ma | aterials invento | ry | |
| PA List of equipment se | erviced / main | tained | V | Personnel list | | | |
| NA = Not Applicable to | | | | Others (List): | | | |
| on – DoD Contractors | | | | | | | |
| 0 | Provider | | Se | ervice | Provid | ler | |
| Service | | | La | undry | | | |
| Oil / Water Separator | | | | | | | |
| 1.000 | /. | - fn - | Pe | est Control | < | | |
| Oil / Water Separator | | MF: | and a second second second | est Control azardous Waste | | | |
| Oil / Water Separator Tools | 10 | NĖ | Ha | | | | |



Industrial Hygiene Site Assessment Visit (IHSAV) Scope of Work (Checklist) Revised: May 14, 2014



| NA | Paint Booth: complete the paint booth evaluation checklist & conduct ventilation assessment |
|----|---|
| NA | Conduct detailed Hazard Assessments (prioritized by highest risk); complete IH Hazard Assessment Forms SEE Attached checklist for common UTES work activities |
| | Conduct Closing Conference to summarize findings & Immediate Hazards |

Bold Font = Form is available in H:\Army National Guard\IHSAV Documents\Forms



General Salety Compliance Assessment Form



Date: 5. 19-14

Revised: September 18, 2013

| Bloodborne Pathogens (1910.1030) | | Applicable | × | Not Applicable |
|--|-----------|--------------|-----|----------------|
| Waste containers | - | Yes | 1 | No |
| PPE available | _ | Yes | 1 | No |
| Compressed Gases (1910.101105) | | Applicable | 1 | Not Applicable |
| Labeled (contents / empty) | 1.2 | Yes | 1 | No |
| Good condition | | Yes | Ť | No |
| Proper storage (O2 vs. flam, chained, upright, etc.) | | Yes | + | No |
| Flammable cylinders grounded | _ | Yes | + | No |
| | | a disease | | |
| Confined Space (1910.146) | | Applicable | X | Not Applicable |
| Labeled w/ "Danger" sign(s) | | Yes | + | No |
| Calibrated direct reading instruments | - | Yes . | + | No |
| Entry materials / supplies | - | Yes . | 1 | No |
| Electrical Safety (1910.301335) | × | Applicable | | Not Applicable |
| GFCI plugs | 0 | Yes | Ø | No |
| Loose / hazardous wires | | Yes | X | No |
| Electrical panels unobstructed & labeled | X | Yes | | No |
| High voltage (>600V); signage / work | 2 | Tes . | ~ | -No |
| Emergency Eyewash / Shower (1910.151) | | Applicable | X | Not Applicable |
| Inspection records | 7. 7 | Yes | 1 | No |
| Unobstructed | | Yes | + | No |
| Properly protected (caps over eyewash, etc.) | - | Yes | t | No |
| | | | - | |
| Emergency Preparedness (1910.3438) | X | Applicable | - | Not Applicable |
| Alarm system | × | Yes | - | No |
| Exits marked / free of obstruction | <u>_X</u> | Yes | | No |
| Ergonomics (Gen. Duty Clause) | × | Applicable | | Not Applicable |
| Workplace evaluation conducted | _ | Yes | x | No |
| Hazard control / precautions in place | | Yes | × | No |
| Fall Protection (1910.2328 & 1926.501503) | | Applicable | Y- | Not Applicable |
| Elevations of 4ft have railings / toeboard | | Yes | 1 | No |
| Fall protection is in good condition | | Yes | T | No |
| Training received / documented | _ | Yes | T | No |
| | | | T | Net Applicable |
| Fire Safety (1910.39 & 1910.157) | X | Applicable | - | Not Applicable |
| Fire extinguishers present | × | Yes | 7 | No |
| Fire extinguishers properly inspected | | Yes | 14 | No |
| Sprinklers unobstructed | APP | Yes | 2 | – No |
| Training received / documented | - | Yes | X | No |
| Forklift, Jacks & Industrial Trucks (1910.178) | | Applicable | × | Not Applicable |
| Labeled with inspection / service date | - | Yes | 1 | No |
| Training received / documented | | Yes | 1 | No |
| Overhead protection | 1 | Yes | 1 | No |
| Hand & Powered Tools (1910.241244) | | Applicable | × | Not Applicable |
| Proper guarding & controls | | Yes | Ť | No |
| 3-prong power cord | _ | Yes | + | No |
| 3-prong power cord Inspections | - | Yes | + | No |
| an Nation without we have been | | | -1 | Not Applicable |
| Hazard Communication (1910.1200) | à | Applicable | - | |
| | | Vac (| × V | Mo |
| Chemical inventory | - | Yes (| X |)No |
| | X | Yes (Yes | X | No No |

Page 1 of 2

| | n:1 |
|------------------|---|
| | Bidg 15 5.20.14 |
| | > Big Issue |
| | - Supply on N. and ; Fan 3 has brigs blowing |
| | cot |
| | - couldn't find opening allowing them in |
| | - could dre blaing from for ble :to a straight shot out |
| | |
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| det and a string | |
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| - | |
| | |

SW/JP/SB 5/20/14 CAMP MUPPAY - BLDG 15 AHV Bide water [West side of bidg] of Budg South 72.8"F main office avea SiEnd Flex duots 2nd fan B ISTSMY 73.3 °FPIENUM in AM REPER 0915 Piex dubts hair and (South end near wall) P 20 -0 E w flex ducts 4 100 AHU . Roof metal duct 1. . . . Fiberglass Lusuletion (theknes?) 73.8" main effice, avea Liner N-end E Drop 2nd fan Tile 3rd supply 74.9 "Fplenium in Am 0915 Supply 1 SUPPLY 2 Se. Supply 3 Supply 4 670 545 93 605 325 710 415 420 262 2.59 Fan 605 1060 580 -> 144 580 -> 545 331 173 755 725 780 475 1380 -> 163 60 725 790 164 192 269 177 uo 380 372 340 970 South of bidg 73.10F NORTH 72.5°F 72.40F 72.2°F 62110 668 275 AVG FPM : 689 311 pldg 12 > 10" > 8" dia. * south edges of supply vents have lower form reduction of airflow down each air shoot padiant heat word in plenum AHU functioning differently (AC/ fam/etc (3) page 7 of 2

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| | [We | es+j | Su I | ppy | ₩; | the | EST AV | -7.e | 160 | swsi | d t | ing and | g pr g ma | essiv Y 6e | re d 3/4 | rops 1 of t | and the w 4 | ay clos |
|---------|----------|------|--|-------|-------------|------|--------|------------------|-----|------|-----|------------|--------------|---------------|-------------|----------------|-------------------|---------|
| AHU | ſ | 515 | 392 | 189 | | 78 | 20 | 29 | | | 43 | 16 | | C 100 | ſ | 105 | 655 | 655 |
| South 1 | | 347 | 422 | 525 | -> | 106 | 31 | 38 | - | 7 | 134 | 5 | 7 3 | 4 - | 7 | 327 | 179 | 93 |
| | | 265 | 337 | 362 | | 92 | 121 | 52 | | | 23 | 5 | 2 4 | 59 | | 194 | 462 | 447 |
| | | 74.1 | 5 73 | 72f | pm | 75.5 | 59 | 36 | pm | | 75 | .2/ | 68 | BEPM | ۹ | 74.9 | \$13 | 35 fp. |
| -AHUT | S | ee | pre | viou | s– <i>s</i> | hee | + | | _ | | | | | | - | | | |
| | | | ι | | | | 2 | | | | | 3 | 3 | | | | ч | |
| AHU | L | 106 | 610 | 555 | | 425 | 271 | 143 | 5 | | 595 | 19 | 4 | 106 | | 180 | 150 | 230 |
| 3 | 4 | 550 | 342 | 640 | -> | 275 | 322 | 27 | 5 | ⇒ | 226 | 20 | 12 | 50 | -> | 260 | 209 | 275 |
| | 1 - | 490 | And in case of the local division of the loc | 715 | | 585 | | | | | 102 | . 18 | 10 | 55 | | 23 | | - |
| South | <u> </u> | 75: | tor/ | 548 | fipm | 74 | 1.90% | 395 _f | em | | 75 | .3°F | 1 24 | 15pm | <u>۸</u> | 75 | 5/2 | 07 fp |
| 30011 | <u> </u> | | 1 | | 1 | | 1 2 | | | | | | 3 | 1 | | - | 4 | 7 |
| - AHU | | 124 | 103 | 148 | | 26 | 7 24 | 10 10 | 03 | | 11 | 09 | 298 | 100 | 2 | 24 | 1130 | 2.61 |
| 4 | | 560 | 250 | 0 251 | 7 | 2.3 | 6 11 | 9 10 | 2 | -> | 2 1 | 65 | 545 | 76 | 13 | 130 | 203 | 99 |
| | | 445 | 1 | | | 148 | | | 39 | 1 | - | 71 | 74 | 174 | - | 185 | - | |
| | | 60: | 172 | 2434 | pm | 6. | 2.4 7 | 159 | | _ | 6 | <u>4.1</u> | °F/ 1 | 974 | þm_ | 6: | 2.77 | 291 f |
| | En. | ST |] | | | | | | | | | | | | | | | |
| | | | | | | | * | | | | | | | | | | | |
| | | | | | | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | | pa | ge_ | 204 | 2 |



| | | | | ey Form |
|-------|----|----------|-----------|---------|
| | | mp mi | | -15 |
| Date: | 19 | MAY | | |
| | | Revised: | May 8, 20 |)14 |



| Name of LEV Model: | System: | | | Serial Number: | |
|-----------------------|-----------------|----------------|----|--------------------------|--|
| Dimensions | 100 D 20 T 20 D | 2"×12" West | OR | "diameter ear Kitchen | |
| 210 | 850 | × | x | | |
| 805 | 920 | × | × | | |
| × | × | × | × | | |

NOTES:

| Nodel: | | | | Serial Number: | |
|--------|--------|---|---------------|---------------------------|---|
| | SUPPLY | | OR side he | " diameter ar 16itcren | / |
| 138 | 244 | × | × | |) |
| 194 | 404 | × | × | | |
| × | × | × | × | | / |

NOTES:

MINOR dirt/dust accumulation

For Vehicle Exhaust Ventilation Systems, obtain the following: (1) types of vehicles serviced in each Bay, (2) average tailpipe temp., (3) engine displacement, & (4) RPM's. NOTE: information may not be available for each vehicle but obtain what you can. Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-Released by National

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 331 of 980

IAQ/ILLUMINATION MEASUREMENTS FACILTIY: Comp Murray - Blog 15

| Location & Directional | 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 | Illumination (FC) |
|---------------------------|--|--|---------------------------------------|---|----------------------|
| Desk Nar Conkense Koom | 783 | 71.3 | 39.9 | 1.4 | 43.8 |
| SBIC Cheit Desk | 788 | 71.S | 39.4 | 1.4 | 86.6 |
| Education Tech | 807 | 71.5 | 39.5 | 1.5 | 20.7 |
| Desk Table New Files | 786 | 71.6 | 39.3 | 1.3 | 83.3 |
| GMIS Clerk Resk | 788 | 7-1.5 | 39.4 | 1.4 | 48.6 |
| Refirement Clerk Desk | 803 | 72.6 | 39.7 | 1.5 | 38.0 |
| Kitchen | 787 | 73.4 | 41.8 | 1.3 | 51.8 |
| Cubicles New Kitchen | 733 | 74.0 | 41.3 | 1.5 | 22.8 |
| Enlisted Remoto Desk | 721 | 74.4 | 40,q | 1.4 | 37.2 |
| Ponokon Saugent Desk | 706 | 74.3 | 40.6 | 1.5 | 49.8 |
| 61 attice | 658 | 7.4.4 | 40.7 | 1.4 | 47.4 |
| Waifing Aren | 695 | 74.5 | 40.6 | 1.4 | 65.5 |
| IDoffice | 675 | 74.5 | 40.4 | 1.8 | 38.8 30.8 |

CO2 = Carbon Dioxide

°F = Fahrenheit

0

C

ć

0

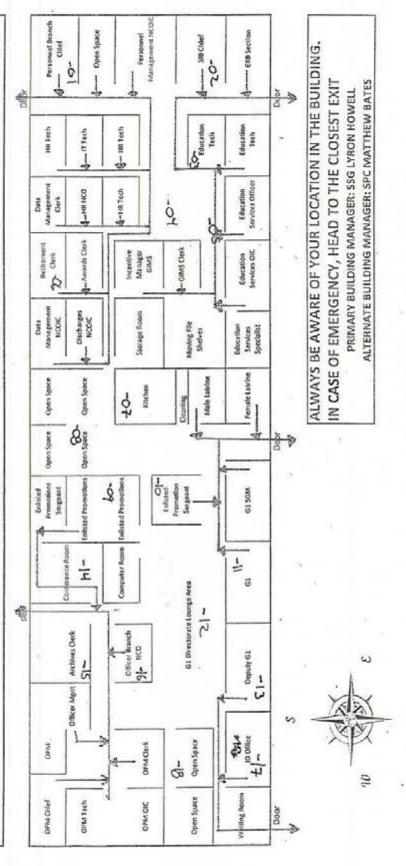
C

C

RH = Relative Humidity

CO = Carbon Monoxide STEL = Short Term Exposure Limit Comp Munny Bldg-15 IAC Lighting Survey





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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 333 of 980



Equipment List - YELLOW CASE Facility: <u>CAMP MORPAY - BLDG</u> 15 Date: <u>19 MAY 2014</u> Revised: May 14, 2014



| Туре | Model Number | Serial Number | Calibration Date |
|-----------------------------|--------------|---------------|------------------|
| Gray Wolf IAQ Meter | IQ-410 | 01-936 | January 2014 |
| TSI VelociCalc Plus | 8385A | 02110331 | July 2013 |
| Extech Light Meter | 407026 | Q105859 | October 2013 |
| -Quest-Sound-Level-Meter- | 2900- | | June 2013 |
| -Quest Acoustic Calibrator- | QC-10 | QIF010094 | July 2013 |
| -Gil-Ari-5/Basic-Pump | N/A | 13520 / 13517 | <u>N/A</u> |
| | | | |
| | | | |
| | | | |



MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 530-268-1860

Certificate of Calibration

Date: Oct 10, 2013

MPC CO

Asset ID

Gage Ty

Manufac

Model N

Temp/RI

Size:

Cert No. 220081202166635

Customer: NETWORK ENVIRONMENTAL **1141 SIBLEY STREET** FOLSOM CA 95630

| W 0/1 000 | ••• | Work Order #: |
|-----------|-------------------------------|----------------|
| ntrol #: | CD3923 | Serial Number: |
| : | N/A | Department: |
| /pe: | FOOT CANDLE/LUX METER W/PROBE | Performed By: |
| turer: | EXTECH INSTRUMENTS, INC. | Received Cond |
| lumber: | 407026 | Returned Cond |
| | N/A | Cal. Date: |
| H; | 68.8°F / 34.5 % | Cal. Interval: |
| | | |

Q105859/Z042817 iber: N/A nt: BARRY MORRIS By: Condition: IN TOLERANCE Condition: IN TOLERANCE October 10, 2013 12 MONTHS al: October 10, 2014 Cal. Due Date:

SAC-70062158

Calibration Notes:

Standards Used to Calibrate Equipment

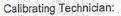
| I.D. | Description. | Model | Serial | Manufacturer C | al. Due Date | Traceability # |
|--------|-------------------------|----------|---------|--------------------|--------------|----------------|
| AW6244 | FOOT CANDLE / LUX METER | N/A | L871057 | EXTECH INSTRUMENTS | Apr 9, 2014 | 2200812107582 |
| Z7000 | UNIFORM SOURCE SYSTEM | USS-600V | 5609 | LABSPHERE | Oct 20, 2014 | 2342356 |

Procedures Used in this Event

Procedure Name 33K4-4-475-1

Description

DIGITAL LIGHT METER





The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage 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 NIST Technical Note 1297, 1994 Edition. Services rendered comply with ISO 17025:2005, ISO 9001:2008, ANSI/NCSL 2540-1, MPC Quality Manual, MPC CSD and with customer purchase order 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 frequency of use, environmental conditions and customer's established systematic accuracy. The information on this report, pertains only to the instrument identified.

All standards are traceable to SI through the National Institute of Standards and Technology (NIST) and/or recognized national or international standards laboratories. Services rendered include proper manufacturer'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.

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MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE **GRASS VALLEY CA 95949** 530-268-1860

Certificate of Calibration

Date: Oct 10, 2013

Cert No. 220081202166635

Customer:

NETWORK ENVIRONMENTAL **1141 SIBLEY STREET**

FOL

| FOLSOM CA 956 | 330 | Work Order #: | SAC-70062158 | |
|----------------|-------------------------------|---------------------|------------------|-------|
| MPC Control #: | CD3923 | Serial Number: | Q105859/Z042817 | 1 1 1 |
| Asset ID: | N/A | Department: | N/A | |
| Gage Type: | FOOT CANDLE/LUX METER W/PROBE | Performed By: | BARRY MORRIS | |
| Manufacturer: | EXTECH INSTRUMENTS, INC. | Received Condition: | IN TOLERANCE | |
| Model Number: | 407026 | Returned Condition: | IN TOLERANCE | |
| Size: | N/A | Cal. Date: | October 10, 2013 | 100 |
| Temp/RH: | 68.8°F / 34.5 % | Cal. Interval: | 12 MONTHS | 1.14 |
| · | | Cal. Due Date: | October 10, 2014 | |

Calibration Notes:

Standards Used to Calibrate Equipment

| I.D. | Description. | Model | Serial | Manufacturer C | al. Due Date | Traceability # |
|--------|-------------------------|----------|---------|--------------------|--------------|----------------|
| AW6244 | FOOT CANDLE / LUX METER | N/A | L671057 | EXTECH INSTRUMENTS | Apr 9, 2014 | 2200812107582 |
| Z7000 | UNIFORM SOURCE SYSTEM | USS-600V | 5609 | LABSPHERE | Oct 20, 2014 | 2342356 |

Procedures Used in this Event

| Procedure N | ame | 영상 영상 가슴 | Description | | |
|-------------|------|----------|-------------|-------------------|----------|
| 3364-4-4 | 75 4 | | סוס | SITAL LIGHT METER | 2 |
| 3314-4 | | | | | |

Calibrating Technician:



QC Approval:



The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage 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 NIST Technical Note 1297, 1994 Edition. Services rendered comply with ISO 17025:2005, ISO 9001:2008, ANSI/NCSL 2540-1; MPC Quality Manual, MPC CSD and with customer purchase order 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 schedulod calibration. Recalibration cycles should be based on frequency of use, environmental conditions and customer's established systematic accuracy. The information on this report, pertains only to the instrument identified.

All standards are traceable to SI through the National Institute of Standards and Technology (NIST) and/or recognized national or international standards laboratories. Services rendered include proper manufacturer's service instruction and are warranted for no less then 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.

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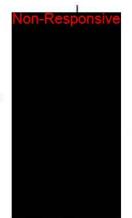
Posted to NGB FOIA Reading Room May, 2018

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| BrayWolf Sensing Solutions | Calibration Certificate | |
|-----------------------------------|-------------------------|--|

| Probe Software Version: v1.3,1,1 Serial Number: 01-936 | Display Software Version: ws2013.13 | Ambient Conditions: | Temperature: 20.9°C | Barometric Pressure: 994.7mbar | Relative Humidity: | Actual: 1.2%RH 31.9%RH 75.0%RH | Measured: 1.2%RH 31.9%RH 75.0%RH | Carbon Monoxide: s/n 10466773-439 | Actual: 0.5ppm 100.0ppm |
|--|-------------------------------------|-------------------------------------|---------------------|----------------------------------|--------------------|--------------------------------|----------------------------------|-----------------------------------|-------------------------|
| Probe Softwa | | | | | | 38.1°C | 38.1°C | | E |
| | 0 | giene SW | * 1 | R | | 20.5°C | 20.5°C | | 1250ppm |
| 0-410 | ocket Solvi | ndustrial Hy | 1/22/2014 | RA #: 140109MSIHS | | 16.5°C | 16.5°C | | 375ppm |
| Model Number of UUT: IQ-410 | Display Model Number: Socket SoMo | Company Name: Industrial Hygiene SW | Calibration Date: | Calibration Due Date: RA #: 1 | Temperature: | Actual: | Measured: | Carbon Dioxide: s/n JX 002577 | Actual: |



GrayWolf Calibration Information: calibration.GrayWolfSensing.com **GrayWolf Sensing Solutions** www.GrayWolfSensing.com Phone: (203) 402-0477

| | | | | EST AVAILABLE COP | L. | | | |
|--|---|--|---|---|---|---|--|--------------------------|
| Tek | atra | onix | | a | Cert | | of Calibrat | |
| | | | | * | | | 7583 | 1990 S G |
| 6 2 | | | Instrum | nent Identificat | ion | | Certificate Page | 1 01 3 |
| Company ID: Non-Resp SUITE C MATHER, C | onsive In on f | NE SW RESS AVE | | · PC | Number: C | c <mark>Non-Resp</mark> | onsive | |
| Instrument | ID: 0214 | 0224 | | N | fodel Numb | or: 9395A | | |
| Manufactu | rer: TSI I | NCORPORATE | | | | er: 02110331 | | |
| Temperature A | Accuracy: : | 3.0% Rdg. or ± 3 = 0.3 °C (± 0.5 °F) % of Reading + (| Carrier and the | is greater | | | | |
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| | | | | | | Interval: | CONTRACTOR AND A | |
| Proced | ME | 6-4-1769-1 AIR TERS | | EMEPERATURE, I | 2011 | Temperature: Humidity: | 23.6 C | |
| Proced | ME | 6-4-1769-1 AIR TERS | | EMEPERATURE, I | 2011 | Temperature: Humidity: | 23.6 C | |
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TABLE 1 LEAD WIPE SAMPLE RESULTS CAMP MURRAY, BUILDING 15 CAMP MURRAY, WA MAY 19, 2014

| Sample Number | Sample Area | Sample Location | Results (µg/ft ²) | ARNG/HUD Standard |
|----------------|-----------------|-----------------------|----------------------------------|-----------------------------------|
| 051914-W-15-01 | Office | Floor, center of room | <1.3 | \leq 40 μ g/ft ² |
| 051914-W-15-02 | Kitchen | Floor | <1.3 | $\leq 40~\mu g/ft^2$ |
| 051914-W-15-03 | Entryway | Floor | <1.3 | \leq 40 μ g/ft ² |
| 051914-W-15-04 | Conference Room | Tabletop | <1.3 | $\leq 40~\mu g/ft^2$ |
| 051914-W-15-05 | ID Waiting Area | Floor | <1.3 | $\leq 40 \ \mu g/ft^2$ |

 μ g/in² = micrograms per square inch

ARNG = Army National Guard ND = none detected at or above the analytical detection limit Bold = Above ARNG Standard limit

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 339 of 980



ANALYTICAL REPORT

Report Date: June 02, 2014

Non-Responsive

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630 Phone: (916) 353-2360 Fax: (916) 353-2375



Workorder: <u>34-1414421</u> Client Project ID: Bldg 15 Purchase Order: <u>013.IH1716.15</u> Project Manager: Non-Responsi

Analytical Results

| Sample ID: 051914-W-15-01 | | | | Collected: 05/19/2014 |
|---------------------------|-----------|-------------------------------|----------------|--|
| Lab ID: 1414421001 | Sampli | Received: 05/23/2014 | | |
| Method: NIOSH 7300 Mod. | Sampling | Media: Gh g Parameter: Are | | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| Sample ID: 051914-W-15-02 | | | | Collected: 05/19/2014 |
|---------------------------|-----------|-------------------------------|----------------|--|
| Lab ID: 1414421002 | Sampli | ng Location: Blo | dg 15 | Received: 05/23/2014 |
| thod: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| Sample ID: 051914-W-15-03 | Somol | ing Location: Bld | a 15 | Collected: 05/19/2014 Received: 05/23/2014 |
|---|-----------|-------------------|--|---|
| Lab ID: 1414421003 Method: NIOSH 7300 Mod. | Samplin | ost Wipe | Prepared: 05/30/2014 Analyzed: 05/30/2014 | |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| Sample ID: 051914-W-15-04 | | | | Collected: 05/19/2014 |
|---------------------------|----------------------|---|----------------|-----------------------|
| Lab ID: 1414421004 | Received: 05/23/2014 | | | |
| Method: NIOSH 7300 Mod. | Samplin | Sampling Location: Bldg 15 Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

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

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ANALYTICAL REPORT

Workorder: 34-1414421 Client Project ID: Bldg 15 Purchase Order: 013.IH1716.15 Project Manager: Non-Responsive

Analytical Results

| Sample ID: 051914-W-15-05 | | | | Collected: 05/19/2014 |
|---------------------------|-----------|-------------------------------|----------------|--|
| Lab ID: 1414421005 | Sampli | ng Location: Blo | dg 15 | Received: 05/23/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| Sample ID: 051914-W-15-blan | k | | | Collected: 05/19/2014 |
|-----------------------------|-----------|-------------------------------|-------------------------------|--|
| Lab ID: 1414421006 | Sampli | ng Location: Blo | dg 15 | Received: 05/23/2014 |
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | ost Wipe ea Not Applicable | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <1.3 | NA | 1.3 | |

Comments

Quality Control: NIOSH 7300 Mod. - (HBN: 127630)

The lead recovery for paint LCS 391410 (113%) was high outside of current limits but within +/- 20% so the data was reported as is without further comment.

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: alslt.lab@ALSGlobal.com Web: www.alsslc.com ANALYTICAL REPORT

| Workorder: | 34-1414421 |
|--------------------|----------------|
| Client Project ID: | |
| Purchase Order: | 013.IH1716.15 |
| 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) | 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/qa/ |
| | 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: | | | |
| 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 |

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.

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| | to see |
| W 1414421 | ANALYTICAL REQUEST FORM |
| | 1. EREGULAR Status |
| | RUSH Status Requested - ADDITIONAL CHARGE RESULTS REQUIRED BY |
| (ALS) | DATE CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES |
| | 11716.15 4. Quote No. |
| | S, Trice ALS Project Manager |
| Address St. | 5. Sample Collection |
| Folsom, CA | Sampling Site 3 15 |
| Person to C Non-Respo | |
| Telephone (| Date of Collection _5/19/14 |
| Fax Telepho | Time Collected |
| E-mail Addre | Date of Shipment |
| Billing Address (in onerent from above) | Chain of Custody No. |
| a | 6. How did you first learn about ALS? |
| | |
| | |

7. REQUEST FOR ANALYSES

| Laboratory Use Only | Client Sample Number | Matrix* | Sample Volume | ANALYSES REQUESTED - Use method number if known | Units** |
|---------------------|----------------------|---------|---------------|---|---------|
| | 051914-W-15-01 | Wipe | 1A+2 | NTOSH 7300 | Hyit |
| | -02 | 1' | 1 | 1 | PT |
| | -03 | | | | 1 |
| | -09 | 1 | | | 11 |
| | -05 | 7 | | | 11 |
| | -bluk | | - the | 1 | 12 |
| | | | | | |
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* Specify: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soli; 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

| Relinquished t | | Date/Time 5/ 2.3 | 2/14 0830 |
|---|-----------|---------------------------|-------------------------|
| Received by | | Date/TimeOS | 05-19 9:50 |
| Relinquished t | | Date/Time | |
| Received by | | Date/Time | |
| 960 West LeVoy Drive / Salt Lake City, UT | 84123 | 800-356-9135 or 801-266-7 | 700 / FAX: 801-268-9992 |
| | ALS Envir | onmental | Non-Responsiv |

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| NAME | STATUS | DESK | CELL PHONE | NAME | STATUS | DESK | CELL PHONE |
|----------------|---------|---------------------------------------|-----------------|----------------|---------------------------|------------------|-----------------|
| BARRAGAN | ADOS | 255-512-8444 | 914-843-6238 | BATES | TECH | 253-512-8150 | 253-691-5637 |
| COFFEY | ADOS | 253-512-8487 | 253-394-2357 | CARTER | TECH | 253-512-8409 | 206-650-6235 |
| JACKSON | ADOS | 253-512-8959 | 253-330-7810 | ENGLISH | TECH | 253-512-8984 | 509-869-2398 |
| KAAIWELA | ADOS | 253-512-8444 | 360-742-0798 | FISHER | TECH | 253-512-8248 | 253-301-7695 |
| LAWTON | ADOS | 253-512-8490 | 253-905-4856 | FLORES | TECH | 253-512-8434 | 253-686-1750 |
| NERIS | ADOS | 253-512-8982 | 614-288-1272 | HARRIS | TECH | 253-512-7586 | 253-686-3797 |
| PECK | ADOS | NO PHONE | 206-491-2783 | MEDFORD | TECH | 253-512-8391 | 360-701-0896 |
| RINEHART K | ADOS | 253-512-8488 | 503-530-6709 | NGUYEN | TECH | 253-512-8252 | 360-556-7149 |
| のないというないで | | ないのであるというと | のないないで、 | QUANTRELL | TECH | 253-512-8080 | 360-701-7019 |
| ないますの時間で | の観察の行 | | | REED MATTHEW | TECH | 253-512-8930 | 509-492-1913 |
| ABANDO | AGR | 253-512-8823 | 253-961-0359 | RINEHART N | TECH | 253-512-8488 | 910-364-3418 |
| ABUNDIS | AGR | 253-512-8556 | 360-801-9156 | SPENCER | TECH | 253-512-7548 | 253-592-3467 |
| BARR | AGR | 253-512-8440 | 253-732-7809 | WOODALL | TECH | 253-512-8435 | 360-292-2517 |
| BLAKEY | AGR | 253-512- | 253-405-7983 | ZAHAREVICH | TECH | 253-512-8838 | 509-948-6213 |
| CARDENAS | AGR | 253-512-8258 | 206-697-2081 | のないないのであると | のないないない | 「「「「「「「「「「」」」」」」 | ないのであるのないない |
| DEAN | AGR | 253-512-8960 | 425-239-3672 | | | 「「「ない」のないのでは、 | 「たちないのない」というない |
| HOWARD | AGR | 253-512-1322 | 253-376-8457 | KOPCZNSKI | CIV | 253-512-831 | 907-385-7637 |
| HOWELL | AGR | 253-512-8327 | 253-376-7520 | なないないないないないないの | Constanting of the second | のないというないないのない | の日本のないであるとなったので |
| KELLMANHOCK | AGR | 253-512-8485 | 360-649-6293 | | | | |
| LOPEZ | AGR | 253-512-8495 | 253-678-7751 | | | | |
| MCLAIN | AGR | 253-512- | 253-370-0295 | Division in | | | |
| MELANCON | AGR | 253-512-8899 | 360-280-7706 | | | | |
| SABATINE | AGR | 253-512-7670 | 253-606-6282 | | | | |
| UMAYAM | AGR | 253-512-8492 | 253-250-7491 | | | | |
| WALPOOL | AGR | 253-512-8932 | 253-228-6811 | 40105 | | | |
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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 344 of 980 Industrial Hygiene Southwest Violation Inventory Log

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

Camp Murray, DCPER Building 15

| | | | BEST AVAILABI | E COPY | | |
|--|---|--|--|--|---|--|
| REFERENCES | 41 CFR 101.20- 107; ANSI RP7- 1991 Standard and MIL-STD- 1472 E | AR 420-1, 5-24b, c, & d | 29 CFR 1910.38 (e) | 29 CFR 1910:1200 (h) | 29 CFR 1910.1200(e)(1)(i) | 29 CFR 1910.157(e) |
| DATE CORRECTED | | | | | | |
| Estimated Cost(s) | | | | | | |
| ACTION | | | | | | |
| SUSPENSE DATE | | | | | | |
| CORRECTIVE ACTIONS (Abatement Plan) | Increase lighting in the locations listed in Section 4.8 and the table in Appendix E. | Conduct a facility survey to ID & assess extent of asbestos hazards; & implement an Asbestos Hazard Management Plan. | Ensure all appropriate personnel receive Emergency Action Plan training and maintain documentation indicating this training has been conducted. | Ensure all appropriate personnel receive HAZCOM training and maintain documentation indicating this training has been conducted. | Create a chemical inventory and obtain MSDS for each chemical onsite, | Have fire extinguishers anually serviced and inspect them monthly; maintain documention of these on the inspection tag. |
| RAC | 4 | m | 4 | 4 | 4 | 0 |
| SITE | Facility | Facility | Facility | Facility | Facility | Facility |
| HAZARD DESCRIPTION | Illumination was insufficient for activities performed. | Asbestos Building Materials: inspection and Asbestos Hazard Management Plan. | Emergency Action Plan training had not been provided. | Hazard Communication (HAZCOM) Program training had not been provided. | The facility did not have a chemical inventory, or coples of MSDS for chemicals present onsite. | The portable fire extinguishers have not been inspected monthly or received annual servicing. |
| CONTROL NUMBER CLOSED | WADCPER- 05192014-4.8 | WADCPER- 05192014-5.3 | WADCPER- 05192014-6.2 | WADCPER- 06192014-6.2 | WADCPER- 05192014-7.1 | WADCPER- 05192014-7.4.1 |

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

Camp Murray, DCPER Building 15

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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 Camp Murray, Building 15. 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 4.0 Sampling Results; Item 2 - Indoor Air Quality).

N4.2 & 5.1 Indoor Air Quality (Temperature) – Conduct further investigation into the causes of the increased temperature and make the necessary repairs to ensure temperatures can be maintained within ASHRAE recommended ranges. Begin by looking at functionality of cooling systems in AHUS 1, 2 & 3 of the east side.

N4.8 Illumination Level Monitoring – Increase illumination levels in the areas found to be below recommended levels. See Section 4.8 of the report or table in Appendix E for a list of locations with insufficient lighting.

N5.3 Asbestos Facility Survey – Conduct an asbestos survey in order to identify asbestos containing materials within the facility. If asbestos containing materials found, then develop and implement an Asbestos Hazard Management Plan.

N6.1 Written Programs and SOPs – Obtain the most recent edition of the WAARNG Building Manager's Handbook (2013) and ensure appropriate site-specific information is added to the Emergency Action Plan and HAZCOM sections.

N6.2 Training Documentation - Conduct safety training for Hazard Communication and Emergency Action Plan. Be sure to maintain documentation of the training.

N7.1 Chemical Inventory – Develop an inventory of hazardous materials/chemicals stored on-site; obtain SDS for each; and maintain a copy of them in an accessible binder to reflect the current inventory.

N7.4.1 Fire Extinguishers- Have annual servicing performed and perform monthly inspections of the fire extinguishers. Document servicing and inspections on the service tag.

N7.4.2 GFCI Outlet - Replace the outlets on both sides of the kitchen sink with GFCI protected outlets.

N7.4.3 Crawl Space Access - Cover the access to the crawl space to prevent pests from accessing the crawl space.

N7.4.4 Exit Sign Not Illuminated – Repair / replace the exit sign to ensure that it is illuminated.

| Breathing Zone samples collected above Occupational Exposure Limit (OEL), with no controls Breathing Zone samples collected above Occupational Exposure Limit (OEL) Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls | | | | | |
|---|-----------|-----|-----|-----|-----|
| Breathing Zone samples collected above Occupational Exposure Limit (OEL) Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls | 953-01-04 | | | c | |
| Number of Personal Noise Dosimetry samples collected >= 85 dBA with no controls | 953-01-04 | | | 0 | |
| | 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 | H | THI | THI | IHT |
| Total number of DOEHRS-IH shops coded as Priority 1 | 953-02-10 | IHT | HT | 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 | HT | H | HT | IHT |
| Number of buildings requiring a basic industrial hygiene characterization within the last 12 months | 953-02-11 | IHT | H | H | ΗT |
| 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 | HT | IHT |
| Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months | 953-02-12 | IHT | THI | ΗT | HT |
| Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit | 953-02-13 | IHT | THI | THI | IHT |
| Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit | 953-02-13 | IHT | IHT | IHT | IHT |

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| FY 14 Installation Status Report (ISR) Services Documentation | Intellicode | Q1 | 02 | 03 | Q4 Annual |
|---|-------------|-----|-----|-----|-----------|
| es within | 953-02-14 | IHT | IHT | LHI | LH . |
| Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months. | 953-02-14 | IHT | IHT | H | Ŧ |
| Number of personnel who were reassessed by industrial hygiene within the last 12 months. | 953-02-15 | ΗT | IHT | H | H |
| Number of personnel who required reassessment by industrial hygiene within the last 12 months. | 953-02-15 | IHT | IHT | H | 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 | IHT | H | 비 |
| 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 | IHT | H | 비 |
| 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 | IHT | HT | Η |
| Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months. | 953-02-17 | THI | HT | 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 | | | 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 | |
| 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 | |
| ations | 953-02-20 | Ħ | THI | HT | IHT |
| Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns | 953-02-20 | IHT | THI | IHT | THI |
| | 53-02-20 | H | HT | THI | E |

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Camp Murray, Building 15 Tacoma, Washington

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| General Facility | Informa | tion | | | Date(s) | of Previous IHSAVs: | None – | No Records | un- |
|--|-----------|----------------|----------|------------|----------|---------------------|-----------|-------------------|-----------------|
| IH(s): Non- | Res | ponsiv | e | | | Date(s) of IHSA | /: May 19 | , 2014 | |
| Facility Name: | 2500 1.05 | mer Service C | 2 51 1V | | 144 | all a scholas | | | |
| Address: Facility Comma | - | ng 15, Camp N | | | | ponsive | | | |
| Safety Officer: | | None Prov | vided | | 41000 | Name / Phone Numbe | r / omail | | |
| | | | | | | Name / Flione Numbe | M-F | | |
| No Person(s): | 30 | Admin: | 30 | Maint | : 0 | Work Sched: | 0800-1630 | Size of Facility: | Not provided |
| (Include status -/ | AGR, Fe | d, Tech., IDR, | , State | or Contrac | t Employ | vee) | | | |
| Unit(s): | | Not On | e Spec | cific Unit | | Co-Tenant(s): | Not One S | Specific Unit | |
| | | Include | UIC if a | available | | | | List All | |
| Primary work activities at Facility: | Admi | nistrative Qu | ality C | ontrol for | the Sta | te | | | |

Written Health & Safety Programs / SOPs

| Program | Program Needed | Have Program | Date of Last Training | # Enrolled | Comments |
|--|-------------------|---------------------|--------------------------|----------------|--------------------------------|
| Confined Space | NA | NA | NA | NA | in page and a part of the |
| Emergency Preparedness | Y | Y | Unknown | | |
| Hazard Communication | Y | Y | Unknown | index allela | to installing the state of the |
| Hearing Conservation | NA | NA | NA | NA | |
| PPE | NA | NA | NA | NA | usa 20%, |
| Respiratory Protection | NA | NA | NA | NA | |
| Others (Bloodborne Pathogens, L Y = Yes N = No N/ | | ut, Lifting Devices | |) – List on ba | ck |

Documents / Records to Obtain

| X | Facility floor plan | evacuation map | X | Hazardous Mater | ials inventory |
|---------|------------------------|-----------------------|--------------|-----------------|----------------|
| NA | List of equipment | serviced / maintained | X | Personnel list | |
| NA | Previous IH repor | ts | és l'hab pin | Others (List): | |
| N | NA = Not Applicable to | this site | | | |
| Non – D | DoD Contractors | | | | |
| Sen | vice | Provider | Serv | vice | Provider |
| Oil / | Water Separator | NONE | Laur | ndry | NONE |
| Too | ls | NONE | Pest | Control | NONE |
| Rag | IS | NONE | Haza | ardous Waste | NONE |
| Refu | | NONE | Crar | ne Maintenance | NONE |

Others:



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

156TH HHC Information Operation Battalion--Camp Murray Bldg 50

Tacoma, WA 98430

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

10001

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 352 of 980 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

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

ARNG-CSG-P

14 JUN 2014

MEMORANDUM THRU NOn-Responsive OHN, Bldg. 6224, 2n Division Dr, JBLM, WA 98433

FOR Commander, 156TH HHC Information Operation Battalion–Camp Murray, Bldg 50, Tacoma, WA 98430

SUBJECT: Executive Summary for Industrial Hygiene Baseline Site Assistance Visit (IHSAV) for 156TH HHC Information Operation Battalion--Camp Murray, Bldg 50, Tacoma, WA conducted on 04 JUN 2014

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Baseline Site Assistance Visit and Indoor Air Quality (IAQ) assessment was conducted at the 156TH HHC Information Operation Battalion--Camp Murray, Bldg 50, Tacoma, WA conducted on 04 JUN 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 IHSAV.

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. Upgrade the illumination levels in identified areas of this building, found in this report. Utilize task lighting whenever fine work is required or older employees need additional lighting. (para. 4.5) (RAC 4)

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for 156TH HHC Information Operation Battalion--Camp Murray, Bldg 50, Tacoma, WA conducted on 04 JUN 2014

b. Ensure all <u>fire extinguishers</u> in Bldg. 50 undergo a monthly maintenance check and document the results of these findings on the tag attached to extinguisher. (para. 4.11.2) (RAC 3)

c. Obtain <u>SDS files and chemical list</u> for products used in this facility. Put SDS's in a binder, with chemical list attached and keep SDS's current. (para. 4.7) (RAC 4)

 d. Contract with a licensed firm to perform an <u>asbestos survey & assessment</u>. If asbestos containing materials are found, awareness training shall be given to personnel working in building. (para. 4.4) (RAC 3)

 e. Clean the <u>return air grilles</u> to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. (para. 4. 6) (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:

(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.

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.

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for 156TH HHC Information Operation Battalion--Camp Murray, Bldg 50, Tacoma, WA conducted on 04 JUN 2014

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 IHSAV.

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>Washington</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

NGB, IHSW, CIV Regional Manager

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| CONTROL | | | Γ | | | | | | |
|----------------------|--|------------------------|-----|--|------------------|--------|----------------------|-------------------|--|
| | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
| B50-060414-4.4 | An asbestos survey is not available for Building 50. | Building 50 | m | Contract with a licensed firm to perform an asbestos survey and assessment If asbestos-containing materials have been identified and assessed, provide awareness training to assigned personnel for the specific material types and locations of asbestos in Building 51. | | | | | 29 CFR 1926.1101 |
| WAB50-060414- 4.5 | The illumination levels in Rooms 102A, 102B, and 105 of Building 50 are inadequate for tasks performed. | Illumination Survey | 4 | Upgrade the illumination levels in Rooms 102A, 102B, and 105 of Building 50 to 50 foot- candles. | | | | | IES/ANSI RP7- 1991 and 41 CFR 101-20- 107, Energy Conservation Rule, Federal Property Management Regulations |
| WAB50-060414- | The return air ducts throughout the building were dusty and in need of deaning | Indoor Air Quality | m | Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. | | | | | Recommended Practice |
| WAB50-060414- | Building maintenance products are stored in the janitor's closet; however, there are no SDS files or chemical inventories on hand. | HazMat | 4 | Obtain SDS files and comple these in a binder for each janitorial product maintained in Building 50. Compile a chemical inventory that lists each janitorial product maintained in Building 50 and place this inventory in front of the SDS's in the binder. | | | | | 29 CFR 1910.1200 (g) (1) & 29 CFR 1910.1200 (e) (I) |

Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS --1 (5 (-1 -. 141

Posted to NGB FOIA Reading Room May, 2018

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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.
- 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:

- 1. Use a vacuum cleaner equipped with a HEPA exhaust filter. HEPA vacuum all surfaces in the room (ceiling, walls trim, and floors). Start with the ceiling and work down, moving toward the entry door. Completely clean each room before moving on.
- 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.



IH ASSISTANCE VISIT

HHC 156 Information Operations Battalion Building 50 Sergeant Major Drive Camp Murray, Washington 98430

June 30, 2014

Prepared for:

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



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IHI Environmental Project No. AL147341

Posted to NGB FOIA Reading Room May, 2018

WAARNG - Building 50

IH Assistance Visit

Project No. A

EXECUTIVE SUMMARY

On June 4, 2014, Non-Responsive E, CSP, with IHI Environmental (IHI) conducted an Industrial Hygiene (IH) Assistance Visit at the Washington Army National Guard, Building 50, Sergeant Major Drive, Camp Murray, Washington 98430. The primary point of contact for information gathered during this survey was Non-Responsive 253) 512-7573, Non-Responsive Non-Responsive vith the Washington Army National

Guard assisted with this survey.

The objectives of this IH Assistance Visit were to perform the following activities:

- evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- inspect the interior rooms of Building 50 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;
- measure illumination levels;
- 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.

Significant findings for this IH Assistance Visit can be found in the Industrial Hygiene Southwest – Violation Inventory Log located in Appendix H 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.

IH Assistance Visit WAARNG – Building 50 Executive Summary

IHI Environmental Project No. AL147341

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1.0 INTRODUCTION

On June 4, 2014, Non-Responsive E, CSP, with IHI Environmental (IHI) conducted an Industrial Hygiene (IH) Assistance Visit at the Washington Army National Guard, Building 50, Sergeant Major Drive, Camp Murray, Washington 98430. The primary point of contact for information gathered during this survey was Non-Responsive (253) 512-7573,

Non-Responsive

ith the Washington Army National

Guard assisted with this survey.

1.1 Objective

The objective of the IH Assistance survey was to evaluate the occupational environment of the administrative areas in Building 50 to determine the presence of operational health and safety risks and make recommendations for corrective actions or follow-up work to manage those risks.

1.2 Scope of Work

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

- evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- inspect the interior rooms of Building 50 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;
- measure illumination levels;
- 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.

2.0 FACILITY DESCRIPTION

The Headquarters Company 156 Bravo Company Information Operations Battalion has one full-time Guard member. The building houses battalion administrative offices, a restroom, and a server room. This building is constructed of brick and stucco on the exterior and has concrete support columns to carry the building load. The interior has gypsum board walls, ceiling tiles and gypsum board ceiling in the classrooms, and the hallways have a drop-in

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ceiling tile grid. The floors are concrete and covered with floor tiles in the hallways and carpeting in the administrative offices. The future plans for this HHC are to vacate this building and move to a new facility in the next year or so.

There are no full-time or part-time civilians employed at Building 50. There are no civilian activities conducted in this building.

Housekeeping is performed by soldiers attached to the unit.

Employees at this building work between 0800-1630 hours, Monday through Friday.

3.0 METHODS AND APPLICABLE REGULATIONS AND STANDARDS

3.1 Painted Surface Evaluation

The interior of Building 50 was visually inspected for peeling paint on the walls and ceilings. If peeling paint was encountered, a representative chip sample was collected, placed in a clean plastic container, and sent to ALS Laboratories for lead analysis by a modified National Institute for Occupational Safety and Health (NIOSH) Method 7300. Lead paint results are reported as percent by weight.

3.2 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

The interior of Building 50 was visually inspected for signs of moisture intrusion that could result in fungal growth. Any signs of moisture intrusion (e.g., discoloration, staining, blistering) were noted and documented on a drawing for a follow-up evaluation.

3.3 Asbestos Management

Building 50 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. IHI also reviewed asbestos awareness training records.

3.4 Illumination Level Monitoring

Illumination measurements were taken in all office areas of Building 50 using an AEMC Instruments Light Meter, Model CA811. Measurements in the 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 shop, measurements were taken from the surfaces of typical work locations and at waist level from selected

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 367 of 980 locations. See the drawing in Appendix D for complete survey information. A copy of the annual calibration certificate for this instrument is located in Appendix G.

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

Building 50's heating, ventilation, and air-conditioning (HVAC) system was evaluated. This evaluation consisted of a visual inspection of the system to note any obvious problems and a review of the facility maintenance plan, if available.

Carbon dioxide (CO₂), temperature, and relative humidity were measured using a TSI Model 7575-X IAQ-Calc[™] Meter. The unit was calibrated before use with certified zero gas and 1,000 parts per million (ppm) CO₂ span gas. See Appendix D for IAQ data.

Carbon dioxide is a normal constituent of exhaled breath and is commonly measured as a screening tool to evaluate whether adequate fresh outdoor air is being provided. 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 Material (ASTM) – International D6245-12, *Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality*). If a building exceeds this guideline, it should not be interpreted as an unhealthy or hazardous situation. An elevated CO₂ level is only an indication that the amount of outside air being brought into a building may be inadequate or poorly distributed, and further investigation may be warranted.

In building areas where there are potential sources of CO₂ other than exhaled breath, the guidelines above cannot be used. The Occupational Safety and Health Administration (OSHA) standard for CO₂ should be used in these instances. The OSHA standard is an eighthour time-weighted average (TWA) of 5,000 ppm, with a short-term 15-minute average limit of 30,000 ppm.

3.6 Hazard Communication and Hazardous Material Storage

The facility's chemical inventory and Material Safety Data Sheet (MSDS) file were evaluated. Janitorial and building maintenance product storage areas were also inspected.

3.7 Safety Training and Recordkeeping

An inspection of safety training programs and documentation was performed to determine if Building 50's site-specific training programs and annual documentation were current.

IH Assistance Visit WAARNG - Building 50 IHI Environmental Project No. AL147341

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3.8 Kitchen Ventilation Survey

Duct velocity measurements are performed on facility kitchen exhaust hoods (when present), using a TSI VelociCalc, Model 8345.

The 2011 National Fire Protection Association Standard 96, Section 8.2.1.1, requires exhaust fan ducts used in commercial cooking equipment to have a duct velocity of not less than 500 feet per minute (fpm).

3.9 Kitchen Appliance Sound-Level Measurements

Sound-pressure-levels of industrial kitchen appliances (when present) are measured using an Extech Type-2 Sound Level Meter in the dBA and dBC ranges, with the meter set on slow response.

3.10 General Safety Walk-Through

A limited Fire/Life Safety Code walk-through evaluation of Building 50 was performed to:

- · document the presence of a fire alarm,
- determine if fire extinguishers are properly mounted and current on their monthly and annual inspections,
- · determine if eyewash station inspections are current, and
- document any fire or safety hazards in Building 50.

3.11 Equipment Used

The following equipment was used for this survey.

| Туре | Model Number | Serial Number | Calibration Date |
|--------------------------------------|--------------|---------------|------------------|
| TSI VelociCalc [™] Meter | 9515 | T95150720007 | 02/21/2014 |
| TSI IAQ-Calc™ Meter | 7575-X | 7575X1306021 | 02/21/2014 |
| AEMC Light Meter | CA811 | 1057FFCY | 03/10/2014 |
| Extech Sound Level Meter | 407736 | 110604630 | 08/14/2013 |

The calibration certificate for this equipment is attached in Appendix G.

IH Assistance Visit WAARNG - Building 50

3.12 Quality Assurance

IHI 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, and 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.
- 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 Painted Surface Evaluation

Peeling paint was not observed on any of the surfaces in this building.

Note: All painted surfaces should be considered suspect lead-containing materials until determined otherwise.

Recommendation

None

4.3 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

The ceilings in Building 50 are covered with ceiling tiles or gypsum board. Construction studs covered with gypsum board comprise the walls in Building 50. There was no water damage noted on the day of the visit. No visible fungal growth was observed in any of the areas surveyed.

Recommendation

None

IH Assistance Visit WAARNG - Building 50

4.4 Asbestos Management

An asbestos survey is not available for Building 50.

According to the Occupational Safety and Health Administration, Code of Federal Regulations (CFR) 1910.1001, thermal system insulation and surfacing materials found in buildings constructed before 1980 are *Presumed Asbestos Containing Material* (PACM).

Recommendations

1. Contract with a licensed firm to perform an asbestos survey and assessment.

2. If asbestos-containing materials have been identified and assessed, provide awareness training to assigned personnel for the specific material types and locations of asbestos in Building 50.

4.5 Illumination

Illumination levels that were measured throughout Building 50 can be found in Appendix D. The numbers represent the illumination levels 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 a 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 summary, 50 FC is the minimum lighting requirement 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 illumination levels in Rooms 102A, 102B, and 105 of Building 50 are inadequate for tasks performed.

Recommendation

1. Upgrade the illumination levels in Rooms 102A, 102B, and 105 of Building 50 to 50 foot-candles.

IH Assistance Visit WAARNG - Building 50

4.6 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality There are two roof-mounted spilt units that supply heating and cooling air to this building. The State of Washington's Facility Maintenance Division regularly services and provides maintenance for the HVAC systems for this building.

The return air ducts throughout the building were dusty and in need of cleaning.

Carbon dioxide concentrations ranged from 447 to 488 ppm throughout the facility, which should not result in building occupant complaints with respect to body odors. Building air temperatures averaged 68°F and relative humidity was between 54 and 55 percent during the testing period. Air temperatures were within the recommended comfort range of 68-75°F and the relative humidity was also within the recommended comfort range of between 30 and 60 percent. Humidity levels above 60 percent can result in proliferation of allergenic or pathogenic organisms, while levels below 30 percent can cause dry eyes, skin, and mucous membranes.

Recommendation

 Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores throughout Building 50.

4.7 Hazardous Materials Inventory and Safety Data Sheets (SDS)

There are no flammable storage cabinets or HazMat buildings associated with Building 50. Building maintenance products are stored in the janitor's closet; however, there are no SDS files or chemical inventories on hand.

Recommendations

 Obtain SDS files and compile these in a binder for each janitorial product maintained in Building 50.

 Compile a chemical inventory that lists each janitorial product maintained in Building 50 and place this inventory in front of the SDSs in the binder.

4.8 Safety Training and Record Keeping

4.8.1 Safety Policies and Procedures

There were no safety policies or procedures on hand at this building; however, there is access

to safety regulations on the share drive.

IH Assistance Visit WAARNG - Building 50 7

IHI Environmental Project No. AL147341

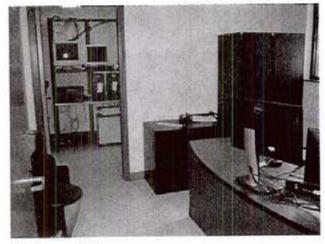
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Photograph 1 Building 50, Camp Murray, WA, Front, Exterior



Photograph 2 Building 50, Camp Murray, WA, Rear, Exterior



Photograph 3 General view - Room 109 and Server Room



Photograph 4 General view – Hallway



Photograph 5 General view - Rooms 102A & B



Photograph 6 General view – Conference Room

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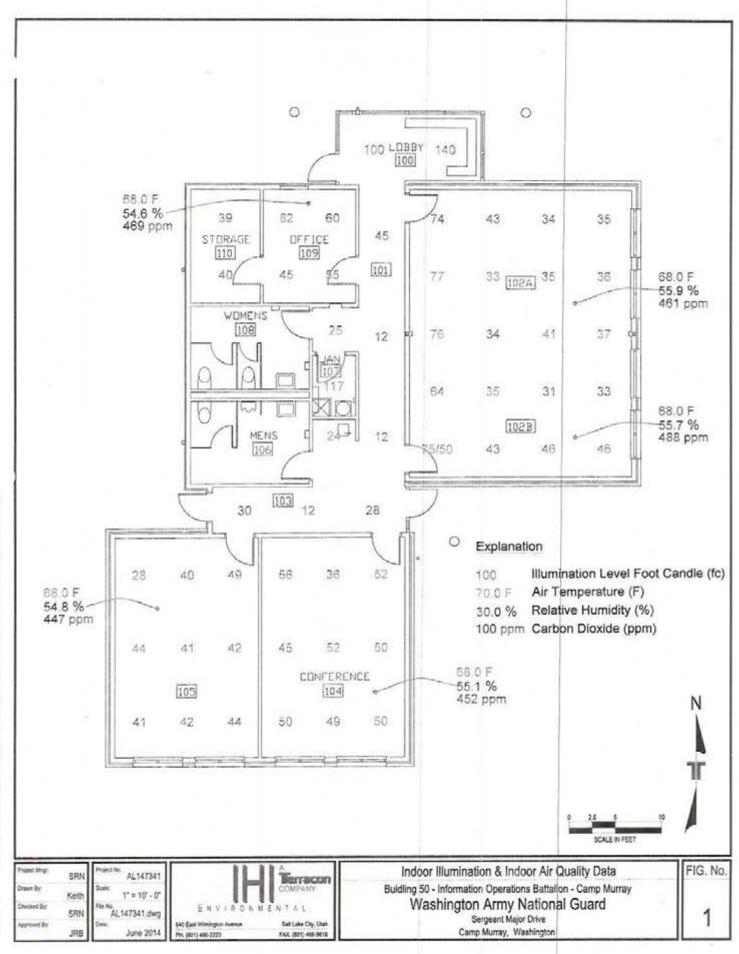
Photograph 7 General view – Room 105



Photograph 8 HazMat – Janitorial products in mechanical room



Photograph 9 IAQ – Dirty return air grille



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FACILITY INFORMATION

(Information listed in First Section)

(1st Few Paragraphs/Pages of Report)

1. Date Prepared: June 4, 2014

2. Names (and Company Name) of Personnel Conducting Industrial Hygiene Site Assistance Visit: Non-Responsive IHI Environmental

3. Facility Name and Brief Summary of Primary Activities Conducted at Facility: Building 50

4. Facility Address: Sargent Major Drive, Camp Murray, WA 98430

5. Primary Unit Assigned to Facility (Ensure to capture and provide Unit Identification Code (UIC)): Mon-Responsive HHC IOB – Headquarter Company – Information Operations Battalion

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

7. Square Ft. Area of Facility: ~2,000 ft^2

8. Work Schedule: 0800-1630 hours Monday- Friday

9. Number of work bays: 0

10. Equipment Density and Type: N/A

a. List Equipment Nomenclature Serviced or Maintained at Facility: N/A

b. List Total Number for Each Nomenclature Serviced or Maintained at Facility: N/A

11. Total Number of Personnel: 1

12. No. of Admin. Personnel (Include Status - AGR

13. No. of Maintenance Personnel (Include Status - None

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

PAGE 1 of 2

17. Total Number of Personnel Enrolled in the Vision Program: 0

18. Facility Commander Non-Responsive

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- Email address, Commercial Telephone Number and Unit Assigned to: Non-Responsive 253) 512-8189 HHC 156 Bravo Company IOB
- 19. Safety Officer: Non-Responsive
 - a. Email Add Non-Responsive

phone Number and Unit Assigned to: (208) 512-1479,

20. Facility Telephone Number: (253) 512-7573; (253) 512-8035

Page 2 of 2

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

| | VIRONMENT (| CONDITION | | | | MODEL | | | 9515 |
|------------------|---|--|--|---|-------------------------|---|--|--|---|
| TE | MPERATURE | | 73.8 (23.2) | °F (°C) | | MODEL | | | |
| RE | LATIVE HUMID | ΓY | 15 | %RH | | SERIAL NUM | DED. | T051 | 50720007 |
| BA | ROMETRIC PRES | SURE | 28.46 (963.8) | inHg (hPa) | | SERIAL NOM | DER | 1001 | 00720001 |
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| | As FOUND | | | C | τυΟ | OF TOLERANCE | | | |
| | | - C A I | LIBRATI | ON VE | RI | FICATIO | N RESUL | т s — | |
| TI | EMPERATURE | VERIFICATION | 1 | | S | YSTEM T-101 | | | Unit: °F (°C |
| # | STANDARD | MEASURED | | LE RANGE | ų į | STANDARD | MEASURED | ALL | WABLE RANGE |
| | | | 215 225 | (0203) | 2 | 140.0 (60.0) | 139.8 (59.9) | 139 5- | 140.5 (59.7-60.3) |
| 1 | 32.0 (0.0) | 32.3 (0.2) | 31.5~32.5 | (-0.30.3) | 14 | 140.0 (00.0) | 133.6 (33.7) | 107.0 | 140.5 (55.7 400.5) |
| | La construction of the second | And Andrew Colored and the second | 31.3~32.3 | (-0.3~0.3) | | YSTEM V-111 | 133.6 (33.7) | | and and other thanks and the second |
| 1 VI # | 32.0 (0.0) ELOCITY VER STANDARD | And Andrew Colored and the second | ALLOWABL | | | | MEASURED | | |
| | ELOCITY VER | IFICATION | | e Range | S | YSTEM V-111 | | ALL0 664- | Unit: fUmin (m/s WABLE RANGE 733 (3.37~3.73) |
| | ELOCITY VER Standard | IFICATION MEASURED | ALLOWABL | e Range 13~0.03) | S # | YSTEM V-111 Standard | MEASURED | ALL0 664- 1143- | Unit: fUmin (m/s WABLE RANCE 733 (3.37~3.73) 1263 (5.81~6.42) |
| # | ELOCITY VER Standard 0 (0.00) | IFICATION MEASURED 0 (0.00) | ALLOWABL -5~5 (-0.0 | E RANGE (3~0.03) (3~0.18) | ¶ # 7 | YSTEM V-111 STANDARD 699 (3.55) | MEASURED 700 (3.56) | ALLO 664- 1143- 1803~ | Unit: fUmin (m/s WABLE RANCE 733 (3.37~3.73) 1263 (5.81~6.42) 1993 (9.16~10.12) |
| # 1 2 | ELOCITY VER Standard 0 (0.00) 30 (0.15) | IFICATION MEASURED 0 (0.00) 29 (0.15) | ALLOWABL -5~5 (-0.0 25~35 (0.1 | E RANGE 13~0.03) 3~0.18) 8~0.33) | S # 7 8 | STANDARD 699 (3.55) 1203 (6.11) | MEASURED 700 (3.56) 1202 (6.10) | ALLO 664- 1143- 1803~ 2572-2 | Unit: fUmin (m/s WABLE RANGE 733 (3.37~3.73) 1263 (5.81~6.42) 1993 (9.16~10.12) 842 (13.06~14.44) |
| # 1 2 3 | ELOCITY VER STANDARD 0 (0.00) 30 (0.15) 60 (0.31) | IFICATION MEASURED 0 (0.00) 29 (0.15) 61 (0.31) | ALLOWABL -5~5 (-0.0 25~35 (0.1 55~65 (0.2 | E RANGE (3~0.03) (3~0.18) (8~0.33) (48~0.53) | 8 # 7 8 9 | YSTEM V-111 STANDARD 699 (3.55) 1203 (6.11) 1898 (9.64) | MEASURED 700 (3.56) 1202 (6.10) 1887 (9.59) | ALLO 664- 1143- 1803~ 2572-2 | Unit: fUmin (m/s WABLE RANCE 733 (3.37~3.73) 1263 (5.81~6.42) 1993 (9.16~10.12) |

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.

| Measurement Variable | System ID | Last Cal. | Cal. Due | Measurement Variable | | Last Cal. 10-11-13 | Cal. Due 04-11-14 |
|----------------------|-----------|-----------|----------|----------------------|---------|-----------------------|----------------------|
| Temperature | E003986 | 10-11-13 | 04-11-14 | Temperature | E003987 | | |
| Barometric Pressure | E001992 | 04-04-13 | 04-04-14 | DC Voltage | E004018 | 01-20-14 | 01-20-15 |
| Temperature | E004398 | 10-28-13 | 04-28-14 | Pressure | E004041 | 09-17-13 | 03-17-14 |
| Pressure | E001058 | 01-15-14 | 07-15-14 | Velocity | E004603 | 09-19-12 | 09-19-17 |

Non-Responsive

February 21, 2014

DOG 10 CERT_GEN_WCC

GB FOI

May, 2018

| ENVIRONMENT CONDITION | | | MODEL | | and the second se | 7575 | -X |
|--|---|--|--------------|--------------------------|---|---|----------------|
| TEMPERATURE | 74.3 (23.5) | °F (°C) | WIDEL | | | | |
| RELATIVE HUMIDITY | 15 | %RH | SERIAL N | UMBER | 7 | 575X130 | 06021 |
| BAROMETRIC PRESSURE | 28.48 (964.4) | inHg (hPa) | | - | | | |
| As Left | | | TOLERANCE | | | | |
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| - C A | LIBRATI | ON VER | | | RESULTS | and the second se | |
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| BAROMETRIC PRESSURE | 1 | and the second | EM PRESSU | RE01-02 | | Unit: | inHg(hPa) |
| # STANDARD MEASURE | | OWABLE RANGE | # S | TANDARD | MEASURED | ALLOWA | BLE RANGE |
| 1 28.58 (967.8) 28.58 (967. | 8) 28.01~ | 29.15 (948.5~987 | .1) | | Luna | | ليستعصب |
| | esponsive | | | | | | |
| | | | <u></u> | | February 21, | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |
| | | | RT_GEN_WCC | | | 2014 | |

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CERTIFICATE OF COMPLIANCE

| PRODUCT: | LIGHTMETER |
|------------|------------|
| MODEL #: | CA811 |
| CATALOG #: | 2121.20 |
| SERIAL #: | 1057FFCY |
| DATE: | 3/10/2014 |

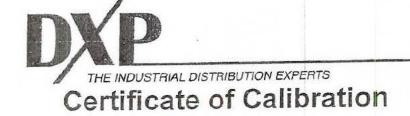
Chauvin Arnoux, Inc./AEMC[®] Instruments certifies that this instrument meets or exceeds specifications as published by the company at the time of shipment. This instrument has been calibrated using standards and instruments traceable to the National Institute of Standards and Technology (NIST) or other certified laboratories.



Chauvin Arnoux[®], Inc d.b.a. AEMC[®] Instruments 15 Faraday Drive • Dover, NH 03820 USA Phone: (603) 749-6434 • Fax: (603) 742-2346 www.aemc.com

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The following equipment was calibrated to manufacturer's specification with instrumentation whose accuracies are traceable to the National Institute of Standards and Technology.

Manufacturer:

Extech Instruments

Model:

Serial Number:

Calibration Date:

Calibrated By:

407736 Sound Level Meter

110604630

August 14, 2013 Non-Responsive

1111 S. 27th St. Billings MT 59101 406-247-2050

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| CONTROL | | | | CODDECTIVE ACTIONS | CIEDENEE | ACTION | Entimeted | DATE | |
|----------------------|--|------------------------|-----|--|----------|-----------|-----------|-----------|--|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abatement Plan) | DATE | OICINCOIC | Cost(s) | CORRECTED | REFERENCES |
| | | | | | | | | | |
| B50-060414-4.4 | An asbestos survey is not available for Building 50. | Building 50 | m | Contract with a licensed firm to perform an asbestos survey and assessment. If asbestos-containing materials have been identified and assessed, provide aw areness training to assigned personnel for the specific material types and locations of asbestos in Bullding 50. | | | | | 29 CFR 1926 1101 |
| WAB50-060414- 4.5 | The illumination levels in Rooms 102A, 102B, and 105 of Building 50 are inadequate for tasks performed. | Illumination Survey | 4 | Upgrade the illumination levels in Rooms 102A, 102B, and 105 of Building 50 to 50 fool-candles. | | | | | ES/ANSI R97- 1991 and 41 CFR 101-20- 107, Energy Conservation Rule, Federal |
| Track | | | | | | | | | Property Management Regulations |
| WAB50-050414- 4.6 | The return air ducts throughout the building were dusty and in need of cleaning | Indoor Air Quality | 0 | Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. | | | | | Recommended Practice |
| 114- | WAB50-060414- Building maintenance products 4.7 are stored in the janilor's | | | 1. Obtain SDS files and compile these in a binder for each | | | | | 29 CFR 1910.1200 (g) (1) |
| TIV Schel | closet; how ever, there are no SDS files or chemical inventories on hand. | HazMat | 4 | janitorial product maintained in Building 50. 2. Compile a chemical inventory that lists each janitorial product maintained in Building 50 and place this inventory in front of the SDS's in the binder. | | | | | \$ 29 CFR 1910.1200 (e) (i) |

Industrial Hygiene Southwest

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Workington Amministry During During ED Comp Murray Workington

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Industrial Hygiene Southwest

Violation Inventory Log LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Washington Army National Guard, Building 50, Camp Murray, Washington

| CONTROL | | | | CORRECTIVE ACTIONS | SUSPENSE | ACTION | Estimated | DATE | |
|------------------------|---|-----------------------|-----|--|----------|--------|-----------|-----------|--|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abstement Plan) | DATE | | Cost(s) | CORRECTED | REFERENCES |
| CLOSED | | | | | | | | | |
| 4.82 4.8.2 | WAB50-060414- There was no documentation 4.8.2 of safety training on hand for this building. | Safety Training | 4 | At a minimum, provide hazard communication and emergency evacuation training to all personnel w ho work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 50. | | | | ÷ | 29 OFR 1910.1200(j)(1), 29 OFR 1910.38(e), & 29 OFR 1910.157(g)(1) & (g) (2) |
| (BS0-060414- 4.11.2 | WABS0-060414- Fire extinguishers are 4.11.2 strategically located throughout Building 50. The annual inspections are current: how ever, monthly inspections are overdue. | Fire Extinguishers | m | Ensure all fire extinguishers in Building 50 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher. | | | | | 29 CFR 1910.157 (e) (2) |

Summary of Recommendations for WAARNG Building 50

4.4 Asbestos Management

Recommendations

1. Contract with a licensed firm to perform an asbestos survey and assessment.

2. If asbestos-containing materials have been identified and assessed, provide awareness training to assigned personnel for the specific material types and locations of asbestos in Building 50.

4.5 Illumination

Recommendation

Upgrade the illumination levels in Rooms 102A, 102B, and 105 of Building 50 to 50 footcandles.

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

Recommendation

Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores throughout Building 50.

4.7 Hazardous Materials Inventory and Safety Data Sheets (SDS)

Recommendations

 Obtain SDS files and compile these in a binder for each janitorial product maintained in Building 50.

2. Compile a chemical inventory that lists each janitorial product maintained in Building 50 and place this inventory in front of the SDS's in the binder.

4.8.2 Training Documents

Recommendation

At a minimum, provide hazard communication and emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 50.

4.11 General Safety Walk-Through

Recommendation

Ensure all fire extinguishers in Building 50 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher.

Recommendation

None

4.8.2 Training Documents

There was no documentation of safety training on file for this building.

Recommendation

1. At a minimum, provide hazard communication and emergency evacuation training to all personnel who work in the building, and fire extinguisher training for those expected to use fire extinguishers in Building 50.

4.9 Kitchen Ventilation Survey

An industrial kitchen is not installed in Building 50; as such, there is no industrial exhaust

fan in the kitchen and a ventilation survey was not performed.

Recommendation

None

4.10 Kitchen Appliance Sound-Level Measurements

There is a household-grade refrigerator, a microwave oven, and a toaster oven used in this building. Since these were not industrial appliances, noise surveys were not performed on these appliances.

Recommendation

None

4.11 General Safety Walk-Through

1. Housekeeping throughout the facility was good.

2. Fire extinguishers are strategically located throughout Building 50. The annual inspections are current; however, monthly inspections are overdue.

3. Fire evacuation routes are posted in Building 50.

- 4. All emergency lights operated when tested.
- 5. There were no openings on any of the electrical panel boxes.

 All ground fault interrupters for electrical receptacles located within six feet of a water source tripped at 7 milliamps or less, as required.

Recommendation

1. Ensure all fire extinguishers in Building 50 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher.

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, IHI'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. IHI assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of IHI, 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 IHI 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.

IH Assistance Visit WAARNG - Building 50 IHI Environmental Project No. AL147341

9

6.0 PROJECT APPROVAL



June 23, 2014 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **Non-Responsive** s at 801-466-2223, or **Non-Responsive** f the Southwest Regional Industrial Hygiene Office at 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.

IH Assistance Visit WAARNG - Building 50 10

IHI Environmental Project No. AL147341

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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).



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

Industrial Hygiene Site Assistance Visit

HHC 156 Information Operations Battalion--Camp Murray Bldg 51 Tacoma, WA 98430

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

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ARNG-CSG-P

14 JUN 2014

MEMORANDUM THRU NOn-Responsive OHN, Bldg. 6224, 2n Division Dr, JBLM, WA 98433

FOR Commander, HHC 156 Information Operations Battalion, Camp Murray Bldg 51 Tacoma, WA 98430

SUBJECT: Executive Summary for Industrial Hygiene Baseline Site Assistance Visit (IHSAV) for HHC 156 Information Operations Battalion, Camp Murray Bldg 51 Tacoma, WA conducted on 04 JUN 2014

1. References. See survey report.

2. General.

a. At the request of the NGB Industrial Hygiene, Southwest (IHSW) Region, an Industrial Hygiene Baseline Site Assistance Visit and Indoor Air Quality (IAQ) assessment was conducted at the HHC 156 Information Operations Battalion, Camp Murray Bldg 51 Tacoma, WA conducted on 04 JUN 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 IHSAV.

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. Increase the <u>frequency of cleaning</u> of the return air grilles to remove build-up of dust accumulations to prevent possible bacteria or proliferation of fungal spores. (para. 4.6) (RAC 3)

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for HHC 156 Information Operations Battalion, Camp Murray Bldg 51 Tacoma, WA conducted on 04 JUN 2014

b. Ensure all fire extinguishers in Bldg. 51 undergo a monthly maintenance check and document the results of these findings on the tag attached to extinguisher. (para. 4.11.2) (RAC 3)

c. Obtain SDS files and chemical list for products used in this facility. Put SDS's in a binder, with chemical list attached and keep SDS's current. (para. 4.7) (RAC 4)

 d. Contract with a licensed firm to perform an asbestos survey & assessment. If asbestos containing materials are found, awareness training shall be given to personnel working in building. (para. 4.4) (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:

(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).

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.

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Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Building 51, Camp Murray, Washington

| | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE | REFERENCES |
|--------------------------|---|-----------------------|----------|--|----------|---------------------|----------------------|------|--|
| WAB51-060414- 4.4 | An asbestos survey is not available for Building 51, | | N. March | Contract with a licensed firm to perform an asbestos survey and assessment. If asbestos-containing the license been identified | | | | | 29 CFR 1926 1101 |
| | | Building 51 | ω | materials have been identified and assessed, provide awareness training to assigned personnel for the specific material types and locations of asbestos in Building 51. | | | | | |
| WAB51-060414- | The return air ducts throughout the building were dusty and in need of cleaning | Indoor Air Quality | ω | Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. | | | | | Recommended Practice |
| WA+A16861- 060414-4.7 | Building maintenance products are stored in the janitor's closet; however, there are no SDS files or chemical inventories on hand. | HazMat | 4 | Obtain SDS files and compile these in a binder for each janitorial product maintained in Building 51. Compile a chemical inventory that lists each janitorial product maintained in Building 51 and place this inventory in front of the SDS's in the binder. | | | | | 29 CFR 1910.1200 (g) (1) & 29 CFR 1910.1200 (e) (i) |
| WAB51-060414- | There was no documentation of safety training on hand for this building. | Safety Training | 4 | At a minimum, provide hazard communication and emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 51. | | | | | 29 CFR 1910.1200(j)(1), 29 CFR 1910.38(e), & 29 CFR 1910.157(g)(1) & (g) (2) |
| WAB51-060414- 4.11.2 | Fire extinguishers are strategically located throughout Building 51. The annual inspections are current; however, monthly inspections are overdue. | Fire Extinguishers | ω | Ensure all fire extinguishers in Building 51 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher. | | | | | 29 CFR 1910.157 (e) (2) |

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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.
- 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:

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.

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IH ASSISTANCE VISIT

HHC 156 Information Operations Battalion Building 51 Sergeant Major Drive Camp Murray, Washington 98430

June 30, 2014

Prepared for:

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



Project No. AL147341

640 EAST WILMINGTON AVENUE SALT LAKE CITY, UT 84106

TELEPHONE: 801-466-2223

FAX: 801-466-9616 DENVER

E-MAIL: IHI@IHI-ENV.COM

SALT LAKE CITY

EMERYVILLE

PHOENIX

SEATTLE

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IH Assistance Visit WAARNG - Building 51 IHI Environmental Project No. AL147341

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EXECUTIVE SUMMARY

PE, CSP, with IHI Environmental (IHI) conducted an On June 4, 2014. Industrial Hygiene (IH) Assistance Visit at the Washington Army National Guard, Building 51, Sergeant Major Drive, Camp Murray, Washington 98430. The primary point of contact on-F for information gathered during this survey was 53) 512-7573.

with the Washington Army National

Guard assisted with this survey.

The objectives of this IH Assistance Visit were to perform the following activities:

- evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- inspect the interior rooms of Building 51 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;
- measure illumination levels;
- 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.

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

IH Assistance Visit WAARNG - Building 51 Executive Summary

IHI Environmental Project No. AL147341

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1.0 INTRODUCTION

On June 4, 2014, Non-Responsive, CSP, with IHI Environmental (IHI) conducted an Industrial Hygiene (IH) Assistance Visit at the Washington Army National Guard, Building 51, Sergeant Major Drive, Camp Murray, Washington 98430. The primary point of contact for information gathered during this survey wa Non-Responsive 253) 512-7573,

Non-Responsive Non-Responsive In the Washington Army National

Guard assisted with this survey.

1.1 Objective

The objective of the IH Assistance survey is to evaluate the occupational environment of the administrative areas in Building 51 to determine the presence of operational health and safety risks, and make recommendations for corrective actions or follow-up work to manage those risks.

1.2 Scope of Work

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

- evaluate the condition of painted surfaces and collect paint chip samples for lead analysis where painted surfaces are peeling;
- inspect the interior rooms of Building 51 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;
- measure illumination levels;
- 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.

2.0 FACILITY DESCRIPTION

The Headquarters Company 156 Information Operations Battalion has two full-time Guard members. The building houses battalion administrative offices, a restroom, and a server room. This building is constructed of brick and stucco on the exterior and has concrete support columns to carry the building load. The interior has gypsum board walls, ceiling tiles and gypsum board ceiling in the classrooms, and the hallways have a drop-in ceiling tile

grid. The floors are concrete and covered with floor tiles in the hallways and carpeting in the administrative offices. The future plans for this HHC are to vacate this building and move to a new facility in the next year or so.

There are no full-time or part-time civilians employed at Building 51. There are no civilian activities conducted in this building.

Housekeeping is performed by soldiers attached to the unit.

Employees at this building work between 0800-1630 hours, Monday through Friday.

3.0 METHODS AND APPLICABLE REGULATIONS AND STANDARDS

3.1 Painted Surface Evaluation

The interior of Building 51 was visually inspected for peeling paint on the walls and ceilings. If peeling paint was encountered, a representative chip sample was collected, placed in a clean plastic container, and sent to ALS Laboratories for lead analysis by a modified National Institute for Occupational Safety and Health (NIOSH) Method 7300. Lead paint results are reported as percent by weight.

3.2 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

The interior of Building 51 was visually inspected for signs of moisture intrusion that could result in fungal growth. Any signs of moisture intrusion (e.g., discoloration, staining, ..., blistering) were noted and documented on a drawing for a follow-up evaluation.

3.3 Asbestos Management

Building 51 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. IHI also reviewed any asbestos awareness training records.

3.4 Illumination Level Monitoring

Illumination measurements were taken in all office areas of Building 51 using an AEMC Instruments Light Meter, Model CA811. Measurements in the 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 shop, measurements were taken from the surfaces of typical work locations and at waist level from selected

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locations. See the drawing in Appendix D for complete survey information. A copy of the annual calibration certificate for this instrument is located in Appendix G.

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

Building 51's heating, ventilation, and air-conditioning (HVAC) system was evaluated. This evaluation consisted of a visual inspection of the system to note any obvious problems and a review of the facility maintenance plan, if available.

Carbon dioxide (CO₂), temperature, and relative humidity were measured using a TSI Model 7575-X IAQ-Calc[™] Meter. The unit was calibrated before use with certified zero gas and 1,000 parts per million (ppm) CO₂ span gas. See Appendix D for IAQ data.

Carbon dioxide is a normal constituent of exhaled breath and is commonly measured as a screening tool to evaluate whether adequate fresh outdoor air is being provided. 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 Material (ASTM) – International D6245-12, *Using Indoor Carbon Dioxide Concentrations to Evaluate Indoor Air Quality*). If a building exceeds this guideline, it should not be interpreted as an unhealthy or hazardous situation. An elevated CO₂ level is only an indication that the amount of outside air being brought into a building may be inadequate or poorly distributed, and further investigation may be warranted.

In building areas where there are potential sources of CO₂ other than exhaled breath, the guidelines above cannot be used. The Occupational Safety and Health Administration (OSHA) standard for CO₂ should be used in these instances. The OSHA standard is an eighthour time-weighted average (TWA) of 5,000 ppm, with a short-term 15-minute average limit of 30,000 ppm.

3.6 Hazard Communication and Hazardous Material Storage

The facility's chemical inventory and Material Safety Data Sheet (MSDS) file were evaluated. Janitorial and building maintenance product storage areas were also inspected.

3.7 Safety Training and Recordkeeping

An inspection of safety training programs and documentation was performed to determine if Building 51's site-specific training programs and annual documentation were current.

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3.8 Kitchen Ventilation Survey

Duct velocity measurements are performed on facility kitchen exhaust hoods (when present), using a TSI VelociCalc, Model 8345.

The 2011 National Fire Protection Association Standard 96, Section 8.2.1.1, requires exhaust fan ducts used in commercial cooking equipment to have a duct velocity of not less than 500 feet per minute (fpm).

3.9 Kitchen Appliance Sound-Level Measurements

Sound-pressure-levels of industrial kitchen appliances (when present) are measured using an Extech Type-2 Sound Level Meter in the dBA and dBC ranges, with the meter set on slow response.

3.10 General Safety Walk-Through

A limited Fire/Life Safety Code walk-through evaluation of Building 51 was performed to:

- · document the presence of a fire alarm,
- determine if fire extinguishers are properly mounted and current on their monthly and annual inspections,
- · determine if eyewash station inspections are current, and
- document any fire or safety hazards in Building 51.

3.11 Equipment Used

The following equipment was used for this survey.

| Туре | Model Number | Serial Number | Calibration Date |
|-----------------------------|--------------|---------------|------------------|
| TSI VelociCalc™ Meter | 9515 | T95150720007 | 02/21/2014 |
| TSI IAQ-Calc™ Meter | 7575-X | 7575X1306021 | 02/21/2014 |
| AEMC Light Meter | CA811 | 1057FFCY | 03/10/2014 |
| Extech Sound Level Meter | 407736 | 110604630 | 08/14/2013 |

The calibration certificate for this equipment is provided in Appendix G.

3.12 Quality Assurance

IHI 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, and 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.
- 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 Painted Surface Evaluation

Peeling paint was not observed on any of the surfaces in this building.

Note: All painted surfaces should be considered suspect lead-containing materials until determined otherwise.

Recommendation

None

4.3 Moisture Intrusion and Limited Visual Fungal Growth Evaluation

The ceilings in Building 51 are covered with ceiling tiles or gypsum board. Construction studs covered with gypsum board comprise the walls in the Building 51. There was no water damage noted on the day of the visit. No visible fungal growth was observed in any of the areas surveyed.

Recommendation

None

IH Assistance Visit WAARNG – Building 51 IHI Environmental Project No. AL147341

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4.4 Asbestos Management

An asbestos survey is not available for Building 51.

According to the Occupational Safety and Health Administration, Code of Federal Regulations (CFR) 1910.1001, thermal system insulation and surfacing materials found in buildings constructed before 1980 are *Presumed Asbestos Containing Material* (PACM).

Recommendations

1. Contract with a licensed firm to perform an asbestos survey and assessment.

 If asbestos-containing materials have been identified and assessed, provide awareness training to assigned personnel for the specific material types and locations of asbestos in Building 51.

4.5 Illumination

Illumination levels that were measured throughout Building 51 can be found in Appendix D. The numbers represent the illumination levels 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 a 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 summary, 50 FC is the minimum lighting requirement 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 illumination levels in Building 51are adequate for tasks performed.

Recommendation

None

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

There are two roof-mounted spilt units that supply heating and cooling air to this building.

IH Assistance Visit WAARNG - Building 51 IHI Environmental Project No. AL147341 The State of Washington's Facility Maintenance Division regularly services and provides maintenance for the HVAC systems for this building.

The return air ducts throughout the building were dusty and in need of cleaning.

Carbon dioxide concentrations ranged from 531 to 573 parts per million throughout the facility, which should not result in building occupant complaints with respect to body odors. Building air temperatures ranged from 69-70°F and relative humidity was between 51 and 53 percent during the testing period. Air temperatures were within the recommended comfort range of 68-75°F and the relative humidity was also within the recommended comfort range of between 30 and 60 percent. Humidity levels above 60 percent can result in proliferation of allergenic or pathogenic organisms, while levels below 30 percent can cause dry eyes, skin, and mucous membranes.

Recommendation

1. Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores throughout Building 51.

4.7 Hazardous Materials Inventory and Safety Data Sheets (SDS)

There are no flammable storage cabinets or HazMat buildings associated with Building 51. Building maintenance products are stored in the janitor's closet; however, there are no SDS files or chemical inventories on hand.

Recommendations

 Obtain SDS files for each janitorial product maintained in Building 51 and compile these in a binder.

Compile a chemical inventory that lists each janitorial product maintained in Building 51 and place this inventory in front of the SDSs in the binder.

4.8 Safety Training and Record Keeping

4.8.1 Safety Policies and Procedures

There were no safety policies or procedures on hand at this building; however, there is access to safety regulations on the share drive.

Recommendation

None

IH Assistance Visit WAARNG - Building 51 IHI Environmental Project No. AL147341

4.8.2 Training Documents

There was no documentation of safety training on file for this building.

Recommendation

1. At a minimum, provide hazard communication and emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 51.

4.9 Kitchen Ventilation Survey

An industrial kitchen is not installed in Building 51; as such, there is no industrial exhaust fan in the kitchen and a ventilation survey was not performed.

Recommendation

None

4.10 Kitchen Appliance Sound-Level Measurements

There is a household-grade refrigerator, a microwave oven, and a toaster oven used in this building. Since these were not industrial appliances, noise surveys were not performed on these appliances.

Recommendation

None

4.11 General Safety Walk-Through

1. Housekeeping throughout the facility was good.

Fire extinguishers are strategically located throughout Building 51. The annual inspections are current; however, monthly inspections are overdue.

3. Fire evacuation routes are posted in Building 51.

4. All emergency lights operated when tested.

5. There were no openings on any of the electrical panel boxes.

6. All ground fault interrupters for electrical receptacles located within six feet of a water source tripped at 7 milliamps or less, as required.

Recommendation

1. Ensure all fire extinguishers in Building 51 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher.

IH Assistance Visit WAARNG – Building 51 IHI Environmental Project No. AL147341

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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, IHI'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. IHI assumes no responsibility for omissions or errors resulting from inaccurate information or data provided by sources outside of IHI, 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 IHI 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



June 23, 2014 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey, please contact **Non-Responsive** at 801-466-2223, or **Non-Responsive** of the Southwest Regional Industrial Hygiene Office at 916-804-1707.

IH Assistance Visit WAARNG - Building 51 IHI Environmental Project No. AL147341

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 410 of 980 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.

IH Assistance Visit WAARNG - Building 51 IHI Environmental Project No. AL147341

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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

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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).

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Photograph 1 Building 51, Camp Murray, WA, Front, Exterior



Photograph 2 Building 51, Camp Murray, WA, Rear, Exterior



Photograph 3 General View - Hallway



Photograph 4 General View – Administrative area Room 102



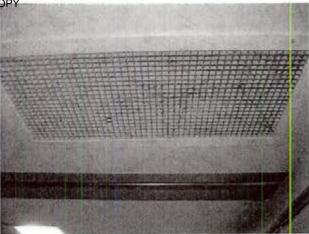
Photograph 5 General View – Administrative area Room 105



Photograph 6 HazMat – Janitorial products in mechanical room



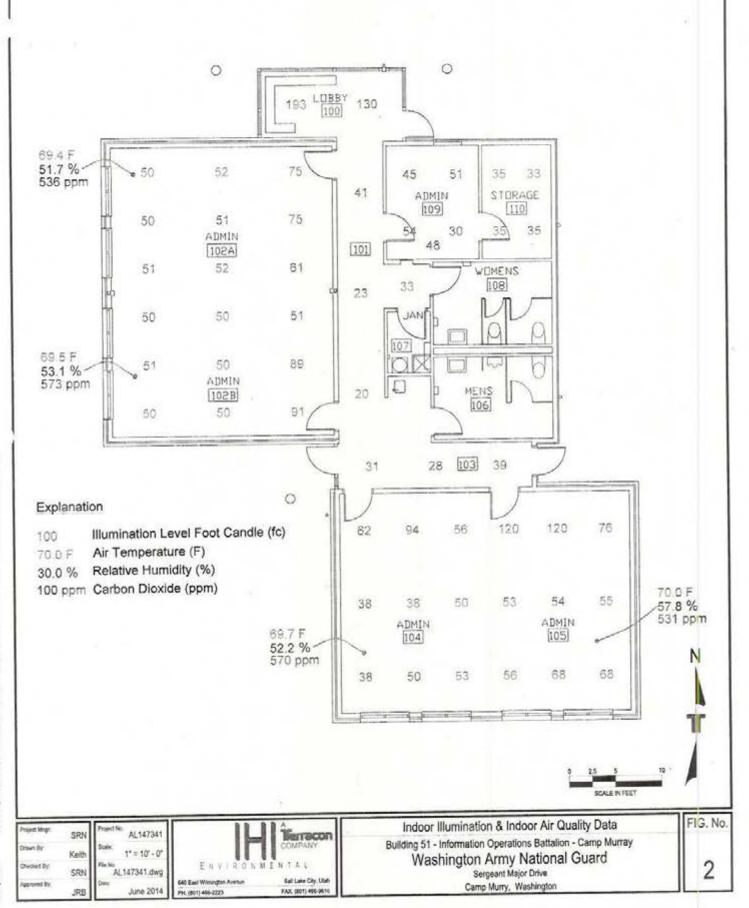
Photograph 7 HazMat – Janitorial products in Men's room



Photograph 8 IAQ – Dirty return air grille



Photograph 9 Safety – Fire extinguisher without current monthly inspections



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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 417 of 980 Appendix F

Field Notes

FACILITY INFORMATION

(Information listed in First Section)

(1st Few Paragraphs/Pages of Report)

1. Date Prepared: June 4, 2014

2. Names (and Company Name) of Personnel Conducting Industrial Hygiene Site Assistance Visit: Non-Responsive

3. Facility Name and Brief Summary of Primary Activities Conducted at Facility: Building 51

4. Facility Address: Sargent Major Drive, Camp Murray, WA 98430

5. Primary Unit Assigned to Facility (Ensure to capture and provide Unit Identification Code (UIC)): Non-Responsive HC IOB – Headquarter Company – Information Operations Battalion

6. Co-Tenant Units Assigned or Working Within Facility (LIST ALL): Alpha Company - NGB Operations Security

7. Square Ft. Area of Facility: ~2,000 ft²

8. Work Schedule: 0800-1630 hours Monday- Friday

- 9. Number of work bays: 0
- 10. Equipment Density and Type: N/A
 - a. List Equipment Nomenclature Serviced or Maintained at Facility: N/A
 - b. List Total Number for Each Nomenclature Serviced or Maintained at Facility: N/A
- 11. Total Number of Personnel: 2
- 12. No. of Admin. Personnel (Include Status AGR
- 13. No. of Maintenance Personnel (Include Status None
- 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

PAGE 1 of 2

17. Total Number of Personnel Enrolled in the Vision Program: 0

18. Facility Commander: Non-Responsive

- a. Email address, Commercial Telephone Number and Unit Assigned to: Non-Responsive 770) 356-3542 HHC IOB
- 19. Safety Officer
 - a. Email Address, Commercial Telephone Number and Unit Assigned to: (208) 512-1479, Non-Responsive
- 20. Facility Telephone Number: (253) 512-7573; (253) 512-8035

Page 2 of 2

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

| ENVIRONMENT CONDITION | | | MODEL | 9515 |
|-----------------------|---------------|------------|------------------|--------------|
| TEMPERATURE | 73.8 (23.2) | °F (°C) | MODEL | 5015 |
| RELATIVE HUMIDITY | 15 | %RH | Contra Numero | T95150720007 |
| BAROMETRIC PRESSURE | 28.46 (963.8) | inHg (hPa) | SERIAL NUMBER | 195150720007 |
| As Left | | Ø1 | N TOLERANCE | |
| As Found | | | OUT OF TOLERANCE | |

- CALIBRATION VERIFICATION RESULTS-

| TE | MPERATURE | VERIFICATION | | S | SYSTEM T-101 | | Unit: °F (°C) |
|----|------------|--------------|----------------------|----|--------------|--------------|-------------------------|
| # | STANDARD | MEASURED | ALLOWABLE RANGE | # | STANDARD | MEASURED | ALLOWABLE RANGE |
| 1 | 32.0 (0.0) | 32.3 (0.2) | 31.5~32.5 (-0.3~0.3) | 2 | 140.0 (60.0) | 139.8 (59.9) | 139.5~140.5 (59.7~60.3) |
| VE | LOCITY VER | IFICATION | | S | YSTEM V-111 | | Unit: ft/min (m/s) |
| # | STANDARD | MEASURED | ALLOWABLE RANGE | # | STANDARD | MEASURED | ALLOWABLE RANGE |
| 1 | 0 (0.00) | 0 (0.00) | -5~5 (-0.03~0.03) | 7 | 699 (3.55) | 700 (3.56) | 664~733 (3.37~3.73) |
| 2 | 30 (0.15) | 29 (0.15) | 25~35 (0.13~0.18) | 8 | 1203 (6.11) | 1202 (6.10) | 1143~1263 (5.81~6.42) |
| 3 | 60 (0.31) | 61 (0.31) | 55~65 (0.28~0.33) | 9 | 1898 (9.64) | 1887 (9.59) | 1803~1993 (9.16~10.12) |
| 4 | 100 (0.51) | 101 (0.51) | 95~105 (0.48~0.53) | 10 | 2707 (13.75) | 2708 (13.76) | 2572-2842 (13.06-14.44) |
| 5 | 200 (1.02) | 200 (1.01) | 190~210 (0.97~1.07) | 11 | 3803 (19.32) | 3776 (19.18) | 3612~3993 (18.35~20.28) |
| 6 | 396 (2.01) | 398 (2.02) | 376-415 (1.91-2.11) | | | | |

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.

| Measurement Variable | System ID | Last Cal. | Cal, Due | Measurement Variable | System 1D | Last Cal. | Cal. Due |
|----------------------|-----------|-----------|----------|----------------------|-----------|-----------|----------|
| Temperature | E003986 | 10-11-13 | 04-11-14 | Temperature | E003987 | 10-11-13 | 04-11-14 |
| Barometric Pressure | E001992 | 04-04-13 | 04-04-14 | DC Voltage | E004018 | 01-20-14 | 01-20-15 |
| Temperature | E004398 | 10-28-13 | 04-28-14 | Pressure | E004041 | 09-17-13 | 03-17-14 |
| Pressure | E001058 | 01-15-14 | 07-15-14 | Velocity | E004603 | 09-19-12 | 09-19-17 |

DOG ID CERT_GEN_WCC



February 21, 2014

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NGB FOIA Reading Room

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|------------------|--|---------------|---------------------|--------|------------|---|--|---------------------------------|
| EMPERATURE | | 74.3 (23.5) | °F (°C) | | | | | |
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CERTIFICATE OF COMPLIANCE

| PRODUCT: | LIGHTMETER |
|------------|------------|
| MODEL #: | CA811 |
| CATALOG #: | 2121.20 |
| SERIAL #: | 1057FFCY |
| DATE: | 3/10/2014 |

Chauvin Arnoux, Inc./AEMC[®] Instruments certifies that this instrument meets or exceeds specifications as published by the company at the time of shipment. This instrument has been calibrated using standards and instruments traceable to the National Institute of Standards and Technology (NIST) or other certified laboratories.

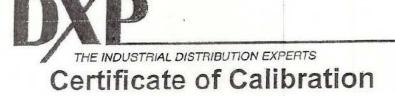


Chauvin Arnoux[®], Inc d.b.a. AEMC[®] Instruments 15 Faraday Drive • Dover, NH 03820 USA Phone: (603) 749-6434 • Fax: (603) 742-2346 www.aemc.com



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The following equipment was calibrated to manufacturer's specification with instrumentation whose accuracies are traceable to the National Institute of Standards and Technology.

Manufacturer:

Extech Instruments

Model:

Serial Number:

Calibration Date:

Calibrated By:

407736 Sound Level Meter

roo couria coror inte

110604630

August 14, 2013



1111 S. 27th St. Billings MT 59101 406-247-2050

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| CONTROL | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE | ACTION | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|------------------------|---|-----------------------|-----|--|----------|--------|----------------------|-------------------|--|
| CLOSED | | | | | | | | | |
| WAB51-060414- 4.4 | An asbestos survey is not avatable for Building 51. | Building 51 | 0 | Contract with a licensed firm to perform an asbestos survey and assessment. If asbestos-containing materials have been identified and assessed, provide aw areness training to assigned personnel for the specific material types and locations of asbestos in Building 51. | | | | | 29 CFR 1926.1101 |
| WAB51-060414- 4.6 | The return air ducts throughout the building were dusty and in need of cleaning | Indoor Air Quality | 3 | Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores. | | | | | Recommended |
| WAB51-060414- 4.7 | Building maintenance products are stored in the janitor's closel, how ever, there are no SDS files or chemical inventories on hand. | HazMat | * | Obtain SDS files and complet these in a binder for each janitorial product maintained in Building 51. Complete a chemical inventory that lists each janitorial product maintained in Building 51 and place this inventory in front of the SDS's in the binder. | | | | | 29 GFR 1910,1200 (g) (1) & 29 CFR 1910,1200 (e) (() |
| WAB51-060414- 4.8.2 | There was no documentation of safety training on hand for this building. | Safety Training | 4 | At a minimum, provide hazard communication and emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 51. | | | | | 29 CFR 1910.1200())(1), 29 CFR 1910.38(e), & 29 CFR 1910.157(g)(1) & (g) (2) |

Industrial Hygiene Southwest

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

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Industrial Hygiene Southwest

Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Building 51, Camp Murray, Washington

| (Abstance Dian) | CORRECTIVE ACTIONS | |
|--|---|--|
| 5 | | SILE MAG |
| ing ing imen imen imen imen imen | Ensure all fire extinguishers in Building 51 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher. | Ersu Build Fire 3 docu Extinguishers 3 docu |

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 426 of 980 Appendix I

Recommendations

Summary of Recommendations for WAARNG Building 51

4.4 Asbestos Management

Recommendations

1. Contract with a licensed firm to perform an asbestos survey and assessment.

2. If asbestos-containing materials have been identified and assessed, provide awareness training to assigned personnel for the specific material types and locations of asbestos in Building 51.

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

Recommendation

Clean the return air grilles to remove the dust accumulations to prevent possible bacteria or proliferation of fungal spores throughout Building 51.

4.7 Hazardous Materials Inventory and Safety Data Sheets (SDS)

Recommendations

1. Obtain SDS files and compile these in a binder for each janitorial product maintained in Building 51.

2. Compile a chemical inventory that lists each janitorial product maintained in Building 51 and place this inventory in front of the SDS's in the binder.

4.8.2 Training Documents

Recommendation

At a minimum, provide hazard communication and emergency evacuation training to all personnel who work the building, and fire extinguisher training for those expected to use fire extinguishers in Building 51.

4.11 General Safety Walk-Through

Recommendation

Ensure all fire extinguishers in Building 51 undergo a monthly maintenance check and document the results of these findings on the cards attached to each fire extinguisher.

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May, 2018

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ARMY NATIONAL GUARD

Jun 12

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

Industrial Hygiene Site Assistance Visit

Ellensburg Armory 901 East 7th Avenue Ellensburg, WA 98926

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

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

ARNG-CSG-P

13 AUG 2012

MEMORANDUM FOR NOn-Responsive The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Ellensburg Armory at 901 E. 7th Ave, Ellensburg, WA on 25 JUL 2012.

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 Armory was closed due to renovation:

- 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Ellensburg Armory on 25 JUL 2012.

4. The technical point of contact is Non-Responsive at (775) 771-3956. For follow up information, contact the Occupational Safety & Health Office, Non-Responsive at (253) 912-3832.



Chief, Industrial Hygiene

CF Non-Responsive

Chief, Occupational Health DSS, Non-Responsive CFM ASO, 20,000 Army Aviation Dr, Reno, NV 89506

CF w/encl

OHN, Non-Responsive 460 Fairview Dr, Carson City, NV 89701 Facility Supervisor Non-Responsive 20,000 Army Aviation Dr, Reno, NV 89506



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

23 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray Tacoma, WA 98430

FOR Commander, Ellensburg Armory and IFR, 901 E. 7th Avenue, Ellensburg, WA 98926

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Ellensburg Armory and IFR, 901 E 7th Avenue, Ellensburg, WA conducted on 25 July 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 Ellensburg Armory, Ellensburg, WA on 25 JUL 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.

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 follow-up IH SAV should be accomplished once the renovation has been completed and normal
operations continue.

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Ellensburg Armory and IFR, 901 E 7th Avenue, Ellensburg, WA conducted on 25 July 2012.

6. Viclation 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.

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).

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.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 433 of 980

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Ellensburg Armory and IFR, 901 E 7th Avenue, Ellensburg, WA conducted on 25 July 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 <u>Washington</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 contac Non-Responsive (775) 771-3956 or via email at Non-Responsive

Non-Responsive

NGB, IHSW, CIV Industrial Hygiene 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

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 435 of 980

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.

- 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.

 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 Services SITE ASSISTANCE VISIT



Army National Guard Ellensburg Armory/IFR 901 E 7th Ave Ellensburg, WA 98926

Prepared for:

Ion-Responsive Ogram Manager Ivational Guard Bureau Industrial Hygiene Southwest

Prepared by:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, Washington 98032

Project Number: ARNG12-001-5&6

Cole & Associates

Page 1

ARNG12-001-5&6

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 440 of 980 Washington Army National Guard Ellensburg Armory & IFR

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ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log |
|--------------|---|-------------------------------------|
| Attachment 2 | - | Photographs |
| Attachment 3 | - | Additional Supporting Documentation |

Follow up IH SAV July 25th, 2012

1.0 EXECUTIVE SUMMARY

On July 25th, 2012, Non-Responsive an Industrial Hygienist with Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Ellensburg Armory located 901 E 7th Ave, in Ellensburg, Washington.

A second inspection was to be performed concentrating only on the IFR (indoor firing range) only however due to the circumstances stated below, this investigation was combined to one report as the information would be identical.

The survey was conducted at the direction of **Non-Responsive** of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a review of previous SAV reports.

The original purpose of this IH SAV was to re-evaluate the lead-contaminated areas inside the armory and to make any recommendations for additional corrective actions or follow-up work to be completed. During attempts to contact a POC for the facility, it was discovered that the facility had apparently changed hands and was assumed to be sold. Confirmation of this was necessary as there were no records available and it was unknown if the facility had been properly cleaned and lead free prior to re-entry.

Upon arriving at the armory, the building was found to be under construction and in the process of a major renovation. The facility was locked and the property surrounded by temporary construction fencing. There were no workers there at the time of the inspection although it appeared work had been performed recently.

A walk through around the property was conducted and photos were taken to document the findings. Interviews with several of the neighbors stated that the armory had been sold to Kittitas County for one dollar approximately two years ago (2010).

The armory is adjacent to the Kittitas County Fairgrounds where an annual county fair is held each summer. A neighbor residing next door to the west stated she had lived there for ten years and each year the armory opened their doors to the public for an Army National Guard display during the county fair. She could not recall hearing noise from a firing range during the time she lived there although she was not certain.

A search of the Kittitas County records was limited however it was discovered that an RFP (request for proposal) advertisement for contractor construction bids to be turned in by November 17th 2011. Construction was estimated to commence shortly thereafter. (RFP in Attachment 3).

Future plans for the building are unsure however records and interviews indicate the building to be part of the county fair. The photos associated with this section are included as Attachment 2.

2.0 BACKGROUND

The Ellensburg armory is a one story concrete structure with a metal corrugated roof. The facility is estimated at approximately 13,000 square feet. Previous reports and existing floor plans confirm the existence of an indoor firing range (IFR) within the building. The DOC is 1950.

Cole & Associates

ARNG12-001-5&6

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Washington Army National Guard Ellensburg Armory & IFR Follow up IH SAV July 25th, 2012

'n the past years, the armory has rented the facility out many times per year to organizations such as the Red Cross, the city of Ellensburg during rodeo week, Girl Scouts, Cub Scouts, and family support groups. They have also participated in many philanthropist functions such as rummage sales and an event called 'Operation Christmas Basket' involving children of all ages.

2.1 Follow-up SAV Objectives

The purpose of a typical follow-up SAV would be to re-evaluate potential high lead levels identified from prior SAV results. This would also include interviews with armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety. Due to the circumstances, interviews with Army personnel could not take place.

2.2 Recurring Observations

Information is typically gathered from previous reports as to the need for follow up investigations. The most recent report available was dated January 2005.

2.2.1 Lead Dust Hazards

Previous inspection reports dating back to 2005 indicate high lead dust levels throughout the facility. These areas include the IFR, weapons vault, drill floor, and the USAR room which is adjacent to the drill floor. The lead levels range up to 6909. It is unknown if an exit audit or a close out inspection was performed before the building was turned over to the new owner.

3.0 SURVEY PROCEDURES

Lead wipe samples are typically collected from dusty horizontal floor surfaces throughout the facility, however, due to the lack of access to the structure, the survey was restricted to visual observation from the outside and information from various sources.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel.

4.1 Lead Dust-Wipe Results

Lead wipe sampling was not conducted as the armory/IFR was sold and under construction.

4.2 Indoor Firing Range

Previous inspection reports confirm the presence of an active Indoor Firing Range.

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5.0 LIMITATIONS AND APPROVALS

5.1 Technical Assistance

Contact Contac

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.

5.2 Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector. This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| Industrial Hygienist: | Non-Responsive | <u>3/15 fp</u> Date |
|-----------------------|--|------------------------|
| Quality Assurance: | Cole & Associates Training & Consulting, Inc. Non-Responsive Cole & Associates Training & Consulting, Inc. | 8/15/12 Date |
| IHSW Program Manager: | Non-Responsive | Date |
| | | |

Cole & Associates

May, 2018

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ARNG12-001-5&6

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|) | | | | AKNG Ellensburg Armory | vrmory | | | | |
|---|--|--------|------|---|------------------|---------------------|----------------------|-------------------|--|
| CONTROL NUMBER CLOSED | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
| Ellensburg WA- 071812-Exec. Summary | Ellensburg WA- 05ervations noted during 071812-Exec. this Industrial Hygiene Site Summary Assistant Visit | Armory | None | Continue Sound Safety and Housekeeping Practices | | | | а. | Prudent Industrial Hygiene Practices, NGB, OSHA Regulations |

Industrial Hygiene Southwest

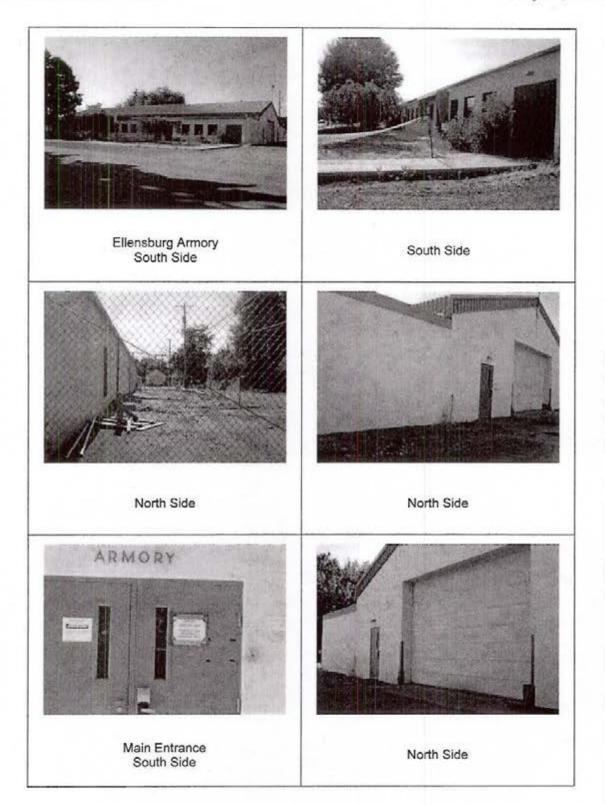
Violation Inventory Log

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

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 445 of 980

Ellensburg Armory / IFR IH Site Assistance Visit

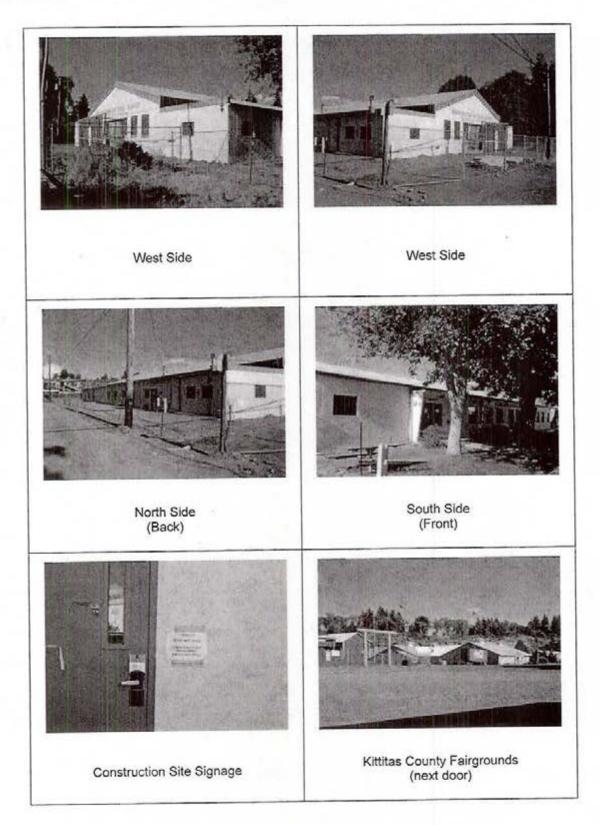
Site Photographs July 25, 2012



Attachment 1, Page 1

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Ellensburg Armory / IFR IH Site Assistance Visit Site Photographs July 25, 2012



Attachment 1, Page 2

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Kittitas County Public TaxSifter Version 4.0

Page 1 of 1



Marsha Weyand Assessor

Kittitas County Assessor



205 W 5th Ave Suite 101 Ellensburg, WA 98926 Phone: (509)962-7501 Fax: (509)962-7666

Commercial Data Sheet

Parcel Information

Parcel Number: 495833 Map Number: 17-18-0 Situs: 00901 \lambda Legal: TOWN

495833 17-18-01056-6212 00901 \E 7TH AVE ELLENSBURG TOWN EBURG SHOUDY'S 2ND LOTS 12 - 16 BLOCK 62

Business Name: Current Owner: Address: City, State: Zipcode:

NATIONAL GUARD ARMORY KITTITAS CO (FAIRGROUNDS) 512 N POPLAR ST ELLENSBURG WA 98926-

Ownership Information

Lot Information

| Topography: | FL | Street Access: | PPY |
|-------------|----------------|----------------|-------|
| Amenities: | | Utilities: | PWSSW |
| | | Deeded Acres: | 0.8 |
| | Lat Danths 440 | | |

Lot Width: 250

Lot Depth: 140

Building Cost Approach Data

| Year | | Class | Area | Perim. | Story/Height |
|--------|------------------|--------------------|-------------------------------------|-----------------|---------------------|
| | 1950 | С | 13432 | 476 | 1/10 |
| Armory | Quality: Average | Condition: Average | Ext. Wall: Concrete Block, Standard | Heat/Cool: Base | board Hot Water (8) |

Refinement Cost Data NO REFINEMENT RECORDS FOUND

Photos/Sketches

Filedate: 7/27/2012 5:08:00 PM



Kittitas County Public TaxSifter Property Assessment

Page 1 of 2



Marsha Weyand Assessor

Kittitas County Assessor



205 W 5th Ave Suite 101 Ellensburg, WA 98926 Phone: (509)962-7501 Fax: (509)962-7666

Property Summary (Appraisal Details)

Parcel Information

Ownership Information

| Parcel Number | : 495833 | Current Owne | r: KITTITAS CO (FAIRGROUNDS) |
|---------------|--|--------------|------------------------------|
| Map Number: | 17-18-01056-6212 | Address: | 512 N POPLAR ST |
| Situs: | 00901 \E 7TH AVE ELLENSBURG | City, State: | ELLENSBURG WA |
| Legal: | TOWN EBURG SHOUDY'S 2ND LOTS 12 - 16 BLOCK 62 | Zipcode: | 98926- |

| Assessment Data | M | larket Value | Ta | axable Val | ue |
|---------------------|------------|--------------|------------|------------|----|
| Tax District: 18 | Land: | 100 | Land: | 0 | |
| Land Use/DOR 48 | Imp: | 0 | Imp: | 0 | |
| Code: | Perm Crop: | 0 | Perm Crop: | 0 | |
| Open Space: | Total: | 100 | Total: | 0 | |
| Open Space Date: | | | | | |
| Senior | | | | | |

Last Revaluation n/a for Tax Year:

Exemption: Deeded Acres: 0.8

Sales History

| Date | Book & Page | # Parcels | Grantor | Grantee | Price |
|------------|-------------|-----------|-----------------------------------|-----------------|-------|
| 01-19-2010 | 2010-0068 | 1 | STATE OF WASH (NATIONAL GUARD) | KITTITAS COUNTY | |

Building Permits

| Permit No. | Date | Description | Amount |
|------------|------------|-------------|-----------|
| 2011-00149 | 04/05/2012 | REMODEL | 1,480,000 |

5 Year Valuation Information

| Year | Billed Owner | Land | Impr. | PermCrop Value | Total | Exempt | Taxable | Taxes |
|------|--------------------------------|------|-------|-------------------|-------|--------|---------|------------|
| 2012 | KITTITAS CO (FAIRGROUNDS) | 0 | 9 | 0 0 | 0 | 0 | 0 | View Taxes |
| | KITTITAS CO (FAIRGROUNDS) | 0 | 3 | 0 0 | 0 | 0 | 0 | View Taxes |
| | STATE OF WASH (NATIONAL GUARD) | 0 | 3 | 0 0 | 0 | 0 | 0 | View Taxes |

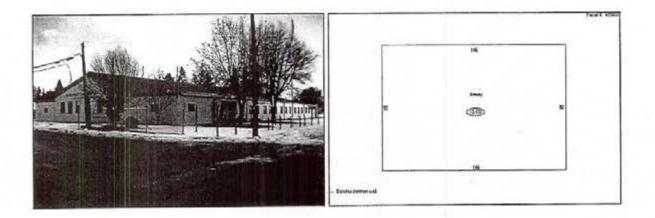
http://kittitaswa.taxsifter.com/taxsifter/t-assessor.asp?pid=495833 7/30/2012 Posted to NGB FOIA Reading Room BEST AVAILABLE COPY May, 2018 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 449 of 980

Kittitas County Public TaxSifter Property Assessment

Page 2 of 2

| 2009 | STATE OF WASH (NATIONAL GUARD) | 0 | 0 | 0 | 0 | 0 | 0 View Taxes |
|------|-----------------------------------|---|---|---|---|---|---------------------|
| 2008 | STATE OF WASH (NATIONAL GUARD) | 0 | 0 | 0 | 0 | 0 | 0 View Taxes |
| 2007 | STATE OF WASH (NATIONAL GUARD) | 0 | 0 | 0 | 0 | 0 | 0 <u>View Taxes</u> |

Parcel Comments NO PARCEL COMMENTS FOR THIS RECORD

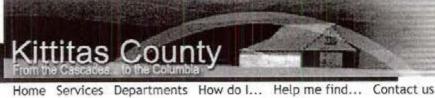


Filedate: 7/27/2012 5:08:00 PM



Kittitas County Public Notices





Notices to the Public

Notices home Search past notices

Public Notice Kittitas County, Ellensburg WA

Call for sealed bids for Armory Remodel

This call for sealed bids is for the Remodel of the Armory Building located at 901 E. 7th Ave, Ellensburg, WA. Bids are due by November 17, 2011 at 2:00 pm at the County Commissioners Office located at 205 West 5th Ave. Suite 108, Ellensburg, WA, at which time bids will no longer be accepted. Bids will be opened at 2:05 pm on November 17, 2011 in Room 109.

Specifications may be seen at the office of the Board of Commissioners and online at http://www.co.kittitas.wa.us/notices/.

SECTION 00 10 00 - ADVERTISEMENT FOR BIDS

NAME OF PROJECT

PROJECT LOCATION

901 E 7th Avenue Ellensburg, WA 98926

205 West 5th Avenue

Kittitas County

Kittitas County Armory

PROJECT COST million Estimated Construction Cost Bid: \$1.4

OWNER

Ellensburg, WA 98926 Project Manager: Patti Johnson (V) (509) 962-7070

ARC Architects 1101 E. Pike St. FL3 Seattle, WA 98122 Project Manager: Daniel Podoll, (V) (206) 322-3322 (Fax) (206) 322-9323 E-mail: podoll@arcarchitects.com

Sealed Bids will be received up to 2:00 PM, Thursday, November 17th, 2011 at the County Commissioners office at 205 West 5th Avenue Suite 108, Ellensburg, WA 98926. Public Bid Opening will follow in Room 109.

BIDS DUE

ARCHITECT

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Each bid and other enclosures shall be enclosed in an opaque, sealed envelope, bearing the name and address of the Bidder and addressed to Kittitas County. Please mark lower left corner of the envelope "Bid - Kittitas County Armory".

PROJECT DESCRIPTION

The project entails an approximate 13,000 sq.ft, remodel of an existing concrete structure including mechanical plumbing/HVAC, electrical power/lighting.. The architect's estimate of probable cost for Base Bid is between \$1 Million to \$1.4 Million. The work is to be substantially completed in 120 calendar days from the date of issuance by the Owner of the Notice to Proceed. The project is to be finally complete within 30 calendar days thereafter.

The Project includes the following Alternate Items:

1. List Alternates

A pre-bid conference will be held at 1:30 PM, Wednesday, November 2, 2011 at 901 E. 7th Avenue, Ellensburg, WA 98926. A tour of the existing facility will follow this conference.

Accompany each bid with a certified check, cashier's check, or surety company bid bond in an amount not less than 5 percent of the Base Bid. Make payable to Kittitas County.

Bidders on this work will be required to comply with the President's Executive Order No. 11246 and 11375 which prohibit discrimination in employment regarding race, creed, color, sex or national origin. Bidders much certify that they do not, and will not, maintain or provide for their employees any facilities segregated on a basis of that are race, color, creed or national origin. Bidders must comply with Title IV of the Civil Rights Act of 1964. Kittitas County is an Equal Opportunity Employer and encourages women, minorities, and Kittitas County Businesses who are qualified to perform this work to submit a bid on this project or to offer their services as a supplier or subcontractor.

ht May, 2018 FOIA Reading Room us/notices/BEST AVAILABLE COPY = 185 FOIA Requested Record #J-15-0065/(WA) 2 Released by National Guard Bureau Page 452 of 980

PRE-BID CONFERENCE

BID BOND

NON-DISCRIMINATION

PREVAILING WAGES

PLAN CENTERS

Pursuant to State Law, no workman, laborer, or mechanic employed in performance of any part of the contract shall be paid less than the "prevailing rate of wage" (in effect as of the date that bids are due) as determined by the Industrial Statistician of the Dept. of Labor and Industries for Kittitas County. Copies of the prevailing wage rate schedule are available directly from the Dept. of Labor and Industries.

Bid Documents are made available as follows: Free of charge access to project bid documents (plans, specifications, addenda, and Bidders List) is provided to General Contractors, Subcontractors, and Vendors by going to www.bxwa.com and clicking on Posted Projects, Public Works, Kittitas County, and Projects Bidding. This on-line plan room provides Bidders with fully usable online documents with the ability to: download, view, print, order full/partial plan sets from numerous reprographic sources, and a free online digitizer/take-off tool. It is recommended that Bidders "Register" in order to receive automatic e-mail notification of future addenda and to place themselves on the "Self-Registered Bidders List". Bidders that do not register will not be automatically notified of addenda and will need to periodically check the on-line plan room for addenda issued on this project. Contact Builders Exchange of Washington at (425) 258-1303 should you require assistance with access or registration.

Bid advertisement and project description may also be viewed on-line at Kittitas County's website at www.co.kittitas.wa.us.

Hard copies of the Bid documents are also available for review only at the following locations: ... Builders Exchange of

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Washington, Inc., 2607 Wetmore Avenue Everett, WA 98201

... Kittitas County Commissioners Office 205 West 5th Avenue Ellensburg, Wa. 98926

RIGHT TO REJECT

RESERVED RIGHTS

WITHDRAW OF BID

BY ORDER OF

PUBLISHED

The Owner reserves the right to reject any and all bids, to waive informalities and irregularities in the bidding, and to accept bids which are considered to be in the best interests of the Owner.

The right is reserved by Kittitas County to postpone contract award for the period of sixty (60) days after the bid opening.

Bidders may not withdraw bids after time set for the Bid Opening, unless award of Contract is delayed for a period exceeding 60 days.

Kittitas County Commissioners

October 20th, 27th, 2011

END OF SECTION 00 10 00

For more information, contact Solid Waste

All bid submittals shall become the property of Kittitas County.

Kittitas County reserves the right to reject all bids and re-advertise if necessary.

Published: Daily Record: 10/20/11, 10/27/11 Daily Journal of Commerce: 10/20/11, 10/27/11

Posted: 10/20/2011, Closes: 11/17/2011, 2:00 PM

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TAUG 12

ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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Industrial Hygiene Site Assistance Visit

Geiger Field Armory 8700 W. Electric Ave. Bldg 2501 Spokane, WA 98291

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

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 455 of 980 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

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 456 of 980



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

30 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Geiger Field Armory, 8700 W. Electric Ave. Bldg 2501, Spokane, WA 98291

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Geiger Field Armory, 8700 W. Electric Ave. Bldg 2501, Spokane, WA conducted on 7 August 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 Gieger Field Armory, Spokane, WA on 07 Aug 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. Armory was not occupied, was closed and not accessible.

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Geiger Field Armory, 8700 W. Electric Ave. Bldg 2501, Spokane, WA conducted on 7 August 2012.

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.

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

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Geiger Field Armory, 8700 W. Electric Ave. Bldg 2501, Spokane, WA conducted on 7 August 2012.

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>Washington</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 undersigned at (775) 771-3956 or via email at



NGB, IHSW, CW Industrial Hygiene

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 459 of 980



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

ARNG-CSG-P

23 AUG 2012

MEMORANDUM FOR Non-Responsive The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Grandview Readiness Center at 8700 W. Electric Ave, Bldg 2501, Spokane, WA on 07 Aug 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Gieger Field Armory, Spokane, WA on 07 AUG 2012.

4. The technical point of contact is Non-Responsive at (775) 771-3956. For follow up information, contact the Occupational Safety & Health Offic Non-Responsive 253) 912-3832.



Chief, Industrial Hygiene

| CF Chief Occupational H | Patth Non-Responsive | |
|----------------------------|---|--|
| DSSNON-Resp | ONSIVE Fairview Dr, Carson City, NV 89701 | |
| CFM ASO | 460 Fairview Dr, Carson City, NV 89701 20,000 Army Aviation Dr, Reno, NV 89506 | |
| CF w/Non-Respons | 460 Fairview Dr, Carson City, NV 89701 | |

Facility Supervisor Non-Responsive 0,000 Army Aviation Dr. Reno, NV 89506

Industrial Hygiene Services SITE ASSISTANCE VISIT



Army National Guard Geiger Field Armory 8700 W. Electric Ave, Bldg. 2501 Spokane, WA 98291

Prepared for:

Program Manager National Guard Bureau Industrial Hygiene Southwest

Prepared by:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, Washington 98032

Project Number: ARNG12-001-8

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Washington Army National Guard Geiger Field Bldg. 2501

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ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log |
|--------------|---|-------------------------|
| Attachment 2 | - | Photographs |
| Attachment 3 | - | Facility Site Plan |

Washington Army National Guard Geiger Field Bldg. 2501 Follow-up IH SAV August 7th, 2012

1.0 EXECUTIVE SUMMARY

On August 7th, 2012, Non-Responsive n Industrial Hygienist with Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Geiger Field Armory located at 8700 W. Electric Ave, Building 2501, in Spokane, Washington.

The survey was conducted at the direction of **Non-Responsive** of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a review of previous SAV reports, interviews, and multiple searches within Spokane County.

The original purpose of this IH SAV was to re-evaluate the lead-contaminated areas inside the armory and to make any recommendations for additional corrective actions or follow-up work to be completed. During attempts to contact a POC for the facility, it was discovered that the facility had apparently changed hands and was assumed to be sold. Confirmation of this was necessary as there were no records available and it was unknown if the facility had been properly cleaned and/or all hazardous materials removed prior to re-occupancy or future demolition plans.

Current records show the National Guard to be in possession of six buildings at Geiger field. Two areas have personnel working in them (bldgs. 402 & 301) and four buildings are used by various units for storage (bldgs. 200, 300, 401, & 2514). A POC, was established with the building manager in 402, Non-Responsive who granted us access to the base and into each building presumed to be owned by the National Guard.

A walk around property was made, however when arriving at building 2501 It was found to be enclosed by a chain link fence and very close to the aircraft runway and could not be accessed. The building appeared very old and run down with pieces of siding (presumed to be CAB).missing. Photos were taken from a distance behind the fence to document what was found and are included in Attachment 2. The buildings adjacent to building 2501 belong to Horizon Air.

Multiple searches of Spokane County agencies found no information regarding the sale of the building.

2.0 BACKGROUND

The Geiger Field Armory (building 2501) is a one story concrete block type structure built during WWII. The total square footage for the building is approximately 9,100 square feet. Past reports and floor plans identify office areas, a large drill floor, supply areas, male and female restrooms, one weapons vault, a boiler room, and a kitchen.

There are no records of an indoor firing range (IFR) at this facility. The facility diagrams/floor plans gave no indication of the existence of an IFR as well.

Reports show the armory was used by personnel for an annual Christmas party for personnel and families. No other civilian functions were held at this facility.

Cole & Associates

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ARNG12-001-8

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 464 of 980 Washington Army National Guard Geiger Field Bldg. 2501 Follow-up IH SAV August 7th, 2012

2.1 Follow-up SAV Objectives

The purpose of a typical follow-up SAV would be to re-evaluate potential high lead levels identified from prior SAV results. This would also include interviews with armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety. Due to the circumstances, interviews with Army personnel could not take place.

2.2 Recurring Observations

Information is typically gathered from previous reports as to the need for follow up investigations, however the most recent report available was dated March 2004.

2.2.1 Lead Dust Hazards

Past reports and analytical results indicated lead dust levels to be well below the recommended level of 200 μ g/ft² which is the current analytical criterion.

2.2.2 Asbestos

Although no asbestos survey was available for the building, past reports indicate presumed ACM in the 9x9 floor tiles/black mastic and on the exterior transite shingles (CAB). It is unknown if the materials were removed prior to the building changing hands.

3.0 SURVEY PROCEDURES

Lead wipe samples are typically collected from dusty horizontal floor surfaces throughout the facility, however, due to the lack of access to the structure, the survey was restricted to visual observation from the outside and information from various sources. Due to the circumstances no dust wipe samples were taken.

4.0 LIMITATIONS AND APPROVALS

4.1 Technical Assistance

Contact of the Southwest Regional Industrial Hygiene Office at (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist, Non-Responsive (253) 912-3181, should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

Cole & Associates

ARNG12-001-8

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 465 of 980 Washington Army National Guard Geiger Field Bldg. 2501 Follow-up IH SAV August 7th, 2012

4.2 Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector. This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

500 Industrial Hygienist: -2742 Date Jane Lunbeck, IIII Cole & Associates Training & Consulting, Inc. Quality Assurance: Date Cole & Associates Training & Consulting, Inc. IHSW Program Manager: Date NGB- Industrial Hygiene Southwest

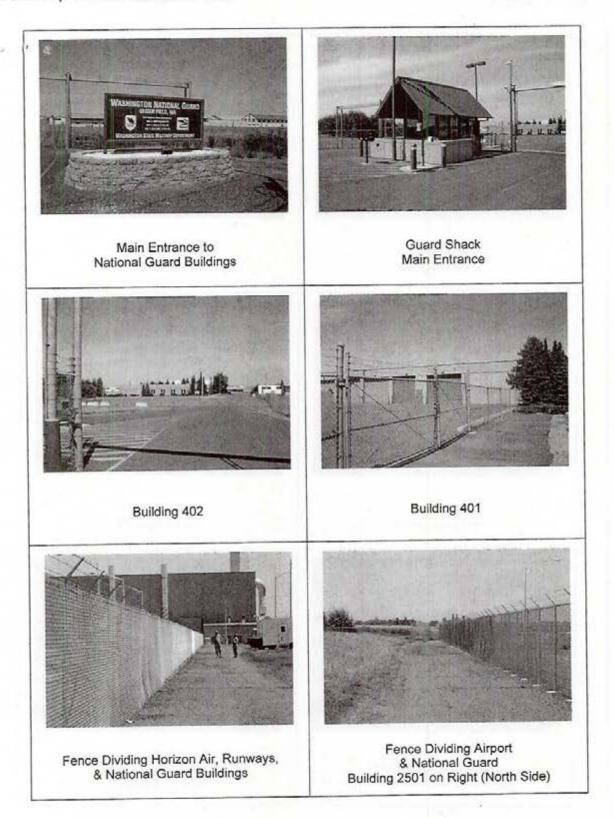
May, 2018

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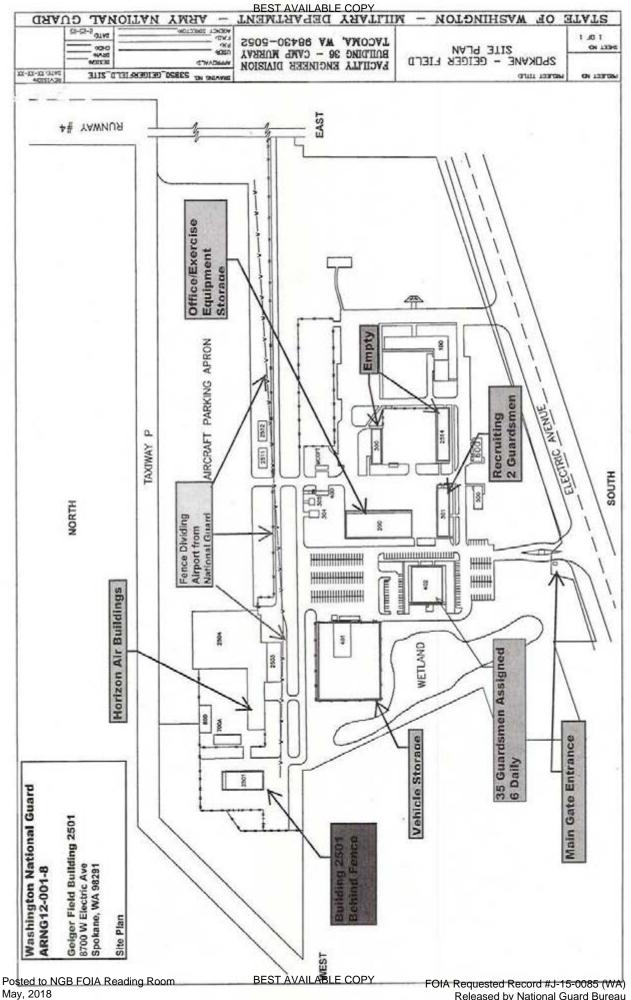
BEST AVAILABLE COPY ARNG12-001-8 Geiger Field Bldg 2501 Follow-up IH Site Assistance Visit

Site Photographs August 7th, 2012



Attachment 3, Page 1

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ARMY NATIONAL GUARD

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

Industrial Hygiene Site Assistance Visit

Grandview Readiness Center 800 Wallace Way Grandview, WA 98930

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



Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 469 of 980



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

17 September 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Grandview Readiness Center (RC), 800 Wallace Way, Grandview, WA 98930

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Grandview Readiness Center (RC), 800 Wallace Way, Grandview, WA conducted on 24 July 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 Grandview Readiness Center, Grandview, WA on 24 JUL 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. This readiness center was well kept and all discrepancies were corrected on the spot.

6. Violation Correction Log.

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Grandview Readiness Center (RC), 800 Wallace Way, Grandview, WA conducted on 24 July 2012.

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.

 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

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Grandview Readiness Center (RC), 800 Wallace Way, Grandview, WA conducted on 24 July 2012.

pertinent and supporting documents) should be completed by the facility personnel and forward to the <u>Washington</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 undersigned at (916) 854-1491 or via email at





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

ARNG-CSG-P

31 JUL 2012

MEMORANDUM FOR NOn-Responsive The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Grandview Readiness Center at 800 Wallace Way, Grandview, WA on 24 JUL 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Grandview Readiness Center on 24 JUL 2012.

4. The technical point of contact is Non-Responsiver, at (775) 771-3956. For follow up information, cor Non-Responsive afety & Health Office Non-Responsive at (253) 912-3832.



Chief, Industrial Hygiene

CF Chief, Occupational HealthNon-Responsive

DSS, Non-Responsive O Fairview Dr, Carson City, NV 89701

CFMC (CFMC) 2460 Fairview Dr, Carson City, NV 89701 ASO, (20,000 Army Aviation Dr, Reno, NV 89506

CF w/encl

OHNNON-Responsive2460 Fairview Dr, Carson City, NV 89701 Facility Supervisor, Non-Responsive0,000 Army Aviation Dr, Reno, NV 89506

2

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

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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> <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.
- 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.

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 Services SITE ASSISTANCE VISIT



Army National Guard – Grandview Readiness Center 800 Wallace Way Grandview, WA 98930

> Prepared for: Non-Responsive Program Manager National Guard Bureau Industrial Hygiene Southwest

> > By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-10

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Follow-up IH SAV July 24th, 2012

ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log |
|--------------|---|-------------------------------------|
| Attachment 2 | - | Facility Diagram |
| Attachment 3 | - | Photographs |
| Attachment 4 | - | Laboratory Analysis Results |
| Attachment 5 | - | Ventilation |
| Attachment 6 | - | Lighting |
| Attachment 7 | - | Additional Supporting Documentation |
| Attachment 8 | | Hazardous Materials List |
| Attachment 9 | - | Recommendations |
| | | |

Follow-up IH SAV July 24th, 2012

1.0 EXECUTIVE SUMMARY

On July 24, 2012, Non-Responsive of Cole & Associates Training & Consulting, Inc. conducted a followup Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Grandview Readiness Center located at 800 Wallace Way, Grandview, WA 98930.

The primary point of contact for information gathered during this survey was Non-Responsive at (509) 728-6700. The survey was conducted at the direction of Non-Responsive of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walkthrough survey of the facility including the drill floor, office areas, locker rooms, supply areas, weapons vaults, indoor firing range (IFR), classrooms, and maintenance bay areas. Existing programs, i.e., respiratory protection, hazardous materials program, etc. were also reviewed for compliance.

The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual reinspection.

A lead dust wipe sampling plan was prepared for the facility to ensure residual lead dust is kept to a minimum. These areas included the drill floor/assembly hall, weapons vaults, maintenance bays and any area where weapons are cleaned or handled. All lead levels are at acceptable levels.

Several industrial hygiene issues were discussed throughout the day during the IH SAV and during nmediately assigned workers to follow the close out interview with Grandview personnel. through and correct issues pointed out during the inspection. Only a few are discussed below.

Shelves in the janitorial closets and flammable lockers were correctly labeled and organized by the following day and a hazardous chemicals inventory list for the facility was created, implemented, and added to the master MSDS binders by the supply sergeant Non-R ponsived his staff. Photos can be found in Attachment 3.

Recommendations that were to be made in this report were corrected and all issues were resolved prior to the completion of this report, therefore recommendations are not necessary.

direction.

nd the Grandview staff should be commended for their willingness to follow through with industrial nygiene issues brought to their attention. Their prompt action, quality of work, and positive attitudes showed exemplary work ethics reflecting outstanding guidance and

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Follow-up IH SAV July 24th, 2012

2.0 INTRODUCTION

The Grandview Readiness Center supports the 792nd Chemical Company (Heavy) - Det. 1 & 2 with 124 members assigned to the unit. The UIC (unit identification code) is Non-Responsive This facility is under the command of AO Non-Responsive Currently there are no co-tenants.

This facility employs 7 full time guard members on a day to day basis and houses up to 80 members on drill weekends which are once a month. The armory was constructed from 1992-1994 and is approximately 24,475 square feet.

The building is rented to civilians for various functions including Quinceaneras, weddings, church functions, and various sporting clubs for practice and events. The guard also has special occasion gatherings for personnel and families.

The armory has general offices and administrative areas, to include command and administrative offices, several classrooms, one arms vault, male & female latrines with showers, a locker room, a boiler room, janitorial supply room, maintenance office, tool room, POL storage and a kitchen.

This facility has an IFR that has been recently converted and included the removal of the backstop and ventilation system. A separate IFR inspection/report was conducted the following day on July 25th, 2012. There are also two maintenance bays, a battery room with an eye wash station/deluge shower, a flammable storage room with an outside entrance, and a POL storage area which reportedly are used for training purposes only.

Weapons are stored in the arms vault within the building, however cleaning and handling of the weapons is said to be performed at the Yakima Training Center on drill weekends.

Findings in this report were obtained by observations at the facility and through interviews with personnel.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

- Section 2 Introduction
- Section 2.3- Recurring Observations

Section 3 - Survey Procedures

- Section 4 Survey Observations and Findings
- Section 5 Written Programs and Approvals

Section 6 - Limitations and Approvals

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Follow-up IH SAV July 24th, 2012

2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility personnel. There were no major issues regarding recurring observations although the POC pointed out evidence of water/moisture leaks throughout the facility on the concrete walls. These areas are identified on the floor plan in Attachment 2 with photos in Attachment 3.

2.3.1 Lead Dust Hazards

Previous inspection reports indicate high lead dust levels.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, locker room, kitchen, classrooms, supply storage areas, and the weapons vault area. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.* The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials \ MSDS

There is a hazardous materials storage room outside the west maintenance bay on the rear of the building. Currently it is not being used. Flammable storage lockers are located in the battery room in the shop area. MSDS binders are current with a Hazardous Materials Inventory list attached to the binders.

4.2 Indoor Firing Range

The facility has an Indoor Firing Range (IFR) that has been recently converted. The conversion included the removal of the backstop, ventilations systems, cleaning, and encapsulation. A clearance inspection was performed following conversion activities although paperwork could not be produced at the time of the inspection. (see separate IFR report).

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4.3 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.3.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

| Sample Number | Location Floors | Results (µg/ft ²) |
|------------------|---|----------------------------------|
| ARNG12-001-10-1 | Drill floor SE | BRL |
| ARNG12-001-10-2 | Drill floor SW | BRL |
| ARNG12-001-10-3 | Drill floor NW | BRL |
| ARNG12-001-10-4 | Drill floor (center) | BRL |
| ARNG12-001-10-5 | Drill floor south end (center) | BRL |
| ARNG12-001-10-6 | Main entrance lobby (bay entrance to drill floor) | BRL |
| ARNG12-001-10-7 | Classroom (center of room) | BRL |
| ARNG12-001-10-8 | SE Shop Door | BRL |
| ARNG12-001-10-9 | Female Locker Room | 16.0 |
| ARNG12-001-10-10 | Inside vault | 19.0 |
| ARNG12-001-10-11 | Outside vault | BRL |
| ARNG12-001-10-12 | Supply room center | BRL |
| ARNG12-001-10-13 | Supply room (by bullet trap door) | 16.0 |
| ARNG12-001-10-14 | Female locker room (top of locker) | BRL |
| ARNG12-001-10-15 | Male locker room(top of locker) | BRL |

Table 4.3.A - Lead Dust-Wipe Results

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| Washington | n Army Nati | onal Guard |
|------------|-------------|------------|
| Grandview | Readiness | Center |

| ion riouaniooo oontor | | |
|-----------------------|--|-------|
| ARNG12-001-10-16 | Janitor storage room | BRL |
| ARNG12-001-10-17 | Kitchen floor | 13.0 |
| ARNG12-001-10-18 | Hallway between drill floor & classrooms | BRL |
| ARNG12-001-10-19 | Field Blank | < 6.3 |

All floor areas tested resulted in dust lead levels well below the recommended level of 200 µg/ft².

4.4 Kitchen Range Hood

The purpose of an exhaust hood is to provide a method of collecting, as nearly as possible, all of the grease produced from the cooking process while furnishing a means of removing heat, smoke and odors from the cooking area.

A sufficient volume of air movement (capture velocity) must be provided to effectively draw grease particles and cooking vapors directly from the cooking surface to the grease extractors. This airflow removes cooking odors and keeps grease particles from settling onto nearby surfaces.

The NFPA 96 standard identifies a TLV concentration of 5mg/m3 at 500 CFM rate of exhaust. The air velocity through any duct shall be not less than365.8 m/min (1200 ft /min).*NFPA. Lighting shall be no less than 70 foot candles at each work station.

A direct reading multi-meter was used to take airflow intake and Illumination readings for the kitchen range hood. The range hood is a wall canopy design with equipment access panels on the side, a sprinkler system, and two overhead lights. Ventilation readings can be found in Attachment 5 and illumination readings in Attachment 6.

Noise readings were also taken with kitchen equipment (range hood, mixers, etc.) turned on separately and with all appliances on simultaneously. Readings did not exceed recommended noise levels of 85db.

Table 4.4.1 Kitchen Range Hood Air Velocity GREENHECK Ventilation Systems

| | Air Velocity (CFM - C | ubic Feet Per Minute) |
|---------|-----------------------|-----------------------|
| Room | CFM | Location |
| Kitchen | 2671 | Range Hood |

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| | Lighting F/C Foot Candles | |
|---------|---------------------------|------|
| Room | Location | F/C |
| Kitchen | Range Hood (Left) | 18.8 |
| Kitchen | Range Hood (Right) | 22.5 |

Table 4.4.1.2 Kitchen Range Hood Illuminations

Illumination levels were below recommended minimum standards for kitchens. Replacing luminaries above stove with higher watt bulbs would greatly improve lighting conditions. As there is no cook assigned to the facility, and the kitchen is not used on a regular basis, this recommendation should be viewed as precautionary.

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

Written programs are current and maintained at the facility.

5.2 Training

Training records are centrally located and maintained at the facility ...

6.0 LIMITATIONS AND APPROVALS

6.1 Technical Assistance

Contact Non-Responsive f the Southwest Regional Industrial Hygiene Office, (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienis, Non-Responsive (253) 912-3181, should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

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Follow-up IH SAV July 24th, 2012

Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| | Non-Responsive | 82. |
|-----------------------|---|------------------------|
| IH Technician: | - | <u>9-27-12</u> Date |
| | Non-Responsive, | |
| Quality Assurance: | Non-ixesponsive, | <u>8/27/12</u> Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manager: | Non-Responsive | Date |
| | NGB- Industrial Hygiene Southwest | Date |

Cole & Associates

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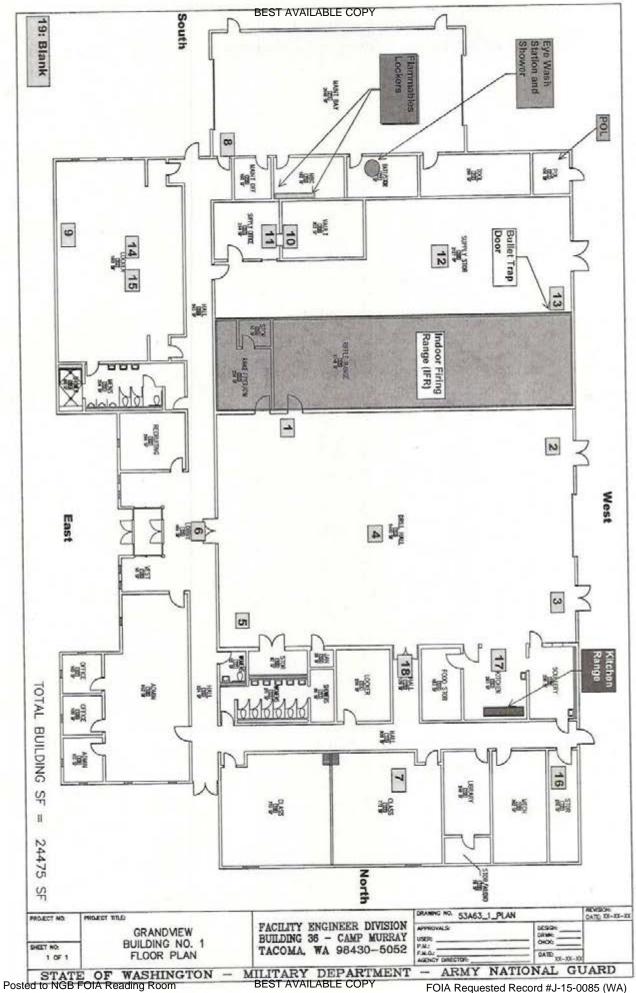
| CONTROL NUMBER CLOSED | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|--|--|-------------|-----|---|------------------|---------------------|----------------------|-------------------|--|
| Granview Armory, WA- 072512-Exec. Summary | No Significant Adverse Observations noted during this industrial Hygiene Site Assistant Visit | Armory None | | Continue Sound Safety and Housekeeping Practices | | | | | Prudent Industrial Hygiene Practices, NGB, OSHA Regulations |

Industrial Hygiene Southwest

Violation Inventory Log

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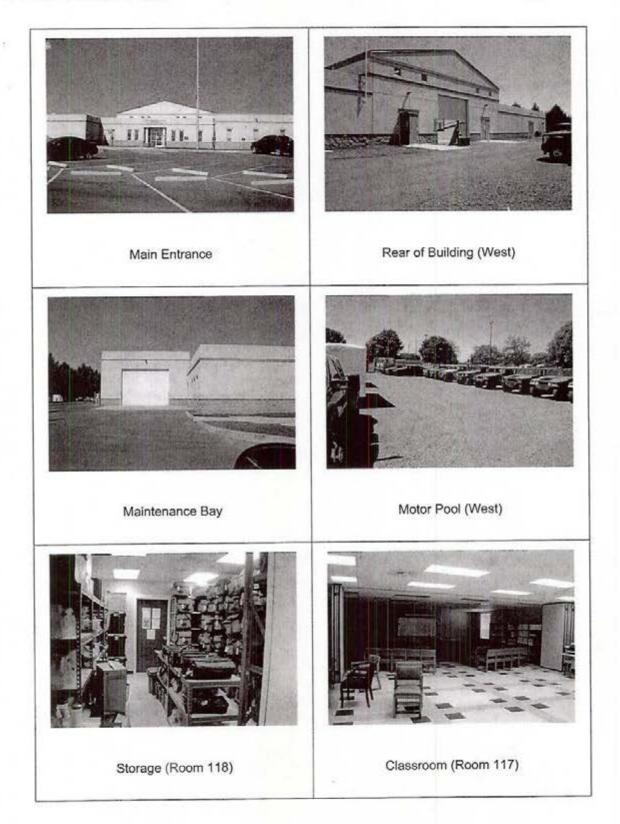


May, 2018

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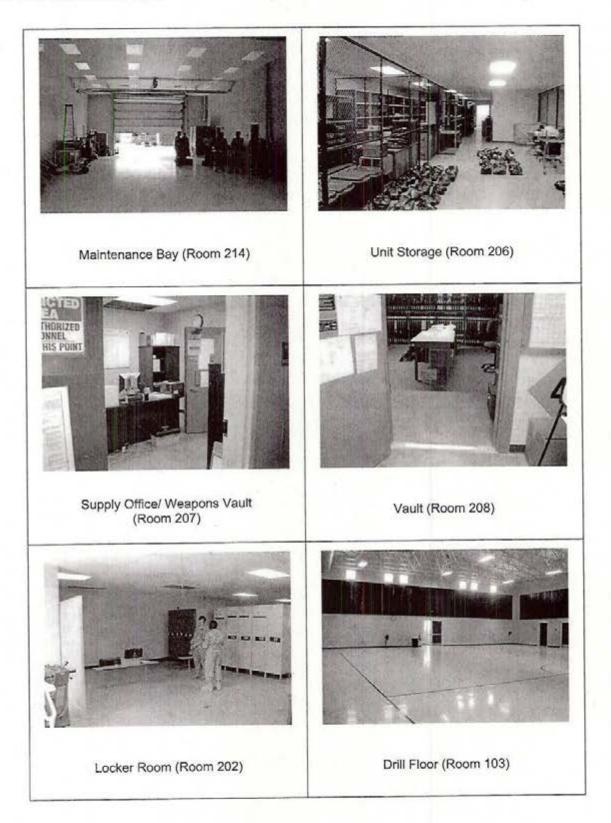
ARNG12-001-10 Grandview RC IH Site Assistance Visit

Site Photographs July, 24th 2012



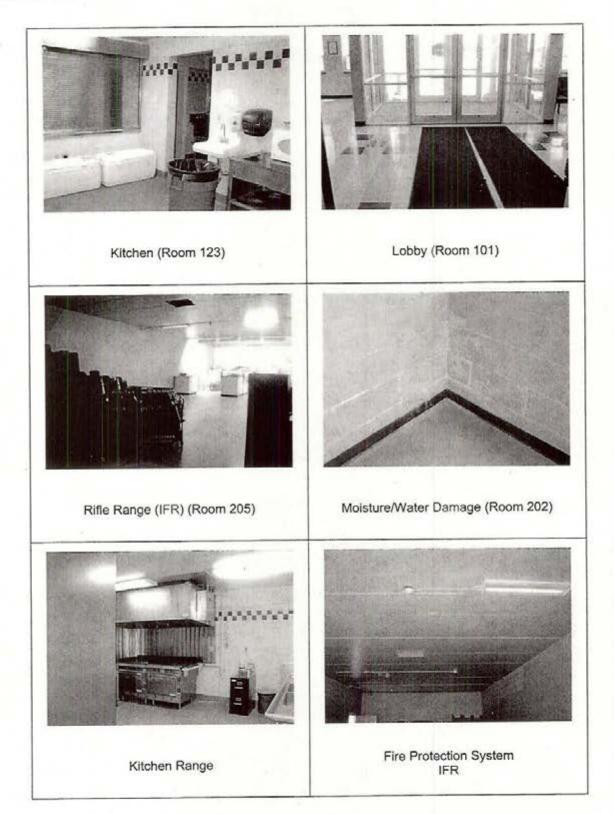
Attachment 3, Page 1

ARNG12-001-10 Grandview RC IH Site Assistance Visit Site Photographs July, 24th 2012



Attachment 3, Page 2

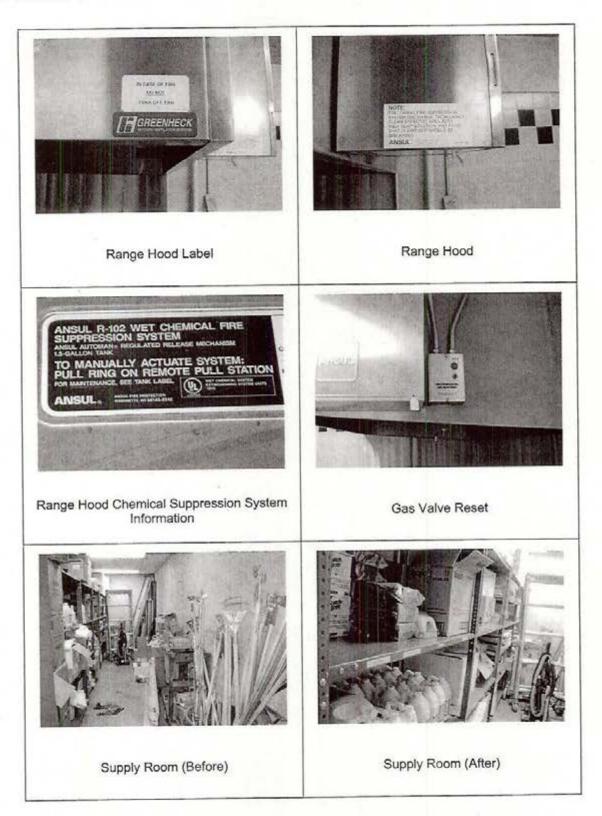
ARNG12-001-10 Grandview RC IH Site Assistance Visit Site Photographs July, 24th 2012



Attachment 3, Page 3

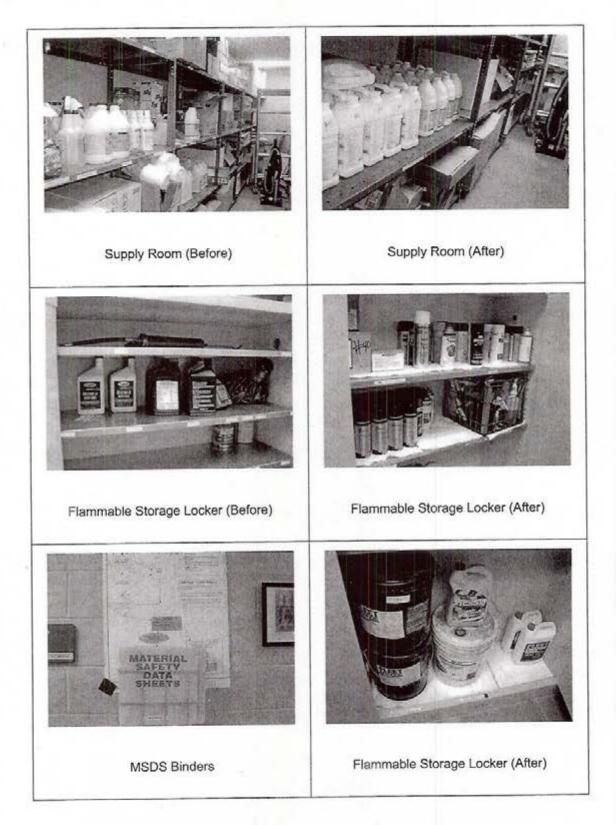
ARNG12-001-10 Grandview RC IH Site Assistance Visit

Site Photographs July, 24th 2012



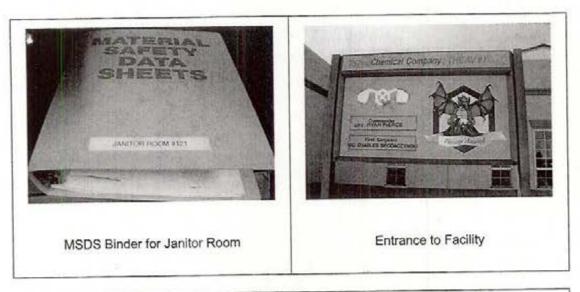
Attachment 3, Page 4

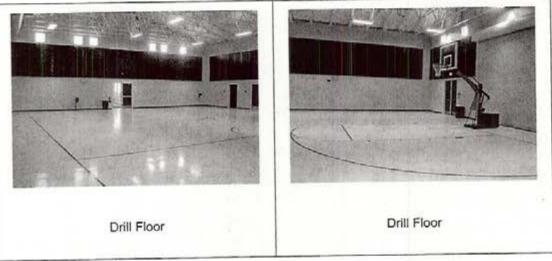
ARNG12-001-10 Grandview RC IH Site Assistance Visit Site Photographs July, 24th 2012



Attachment 3, Page 5

ARNG12-001-10 Grandview RC IH Site Assistance Visit Site Photographs July, 24th 2012





Attachment 3, Page 6

RESERVOIRS ENVIRONMENTAL, INC. 5801 Logan St., Suite 100

Denver CO 80216

TABLE

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 241257-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-10 |
| Client Project Description: | Grandview Readiness Center |
| Date Samples Received: | July 31, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | August 2, 2012 |

ANALYSIS:

| Client | Lab | | Sample | LEAD | Reporting | LEAD |
|------------------|--------|--------|------------------|------|--------------------------------|--|
| ID Number | ID Nun | nber | Area (sq.ft.) | (µg) | Limit (µg/ft ²) | CONCENTRATION (µg/ft ²) |
| ARNG12-001-10-1 | EM 89 | 95034 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-2 | EM 89 | 95035 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-3 | EM 89 | 95036 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-4 | EM 89 | 95037 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-5 | | 95038 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-6 | EM 8 | 95039 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-7 | EM 8 | 95040 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-8 | EM 8 | 95041 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-9 | EM 8 | 95042 | 0.50 | 8.0 | 12.5 | 16.0 |
| ARNG12-001-10-10 | EM 8 | 95043 | 0.50 | 9.5 | 12.5 | 19.0 |
| ARNG12-001-10-11 | EM 8 | 95044 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-12 | EM 8 | 95045 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-13 | EM 8 | 95046 | 0.50 | 8.0 | 12.5 | 16.0 |
| ARNG12-001-10-14 | EM 8 | 95047 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-15 | EM 8 | 95048 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-16 | EM 8 | 95049 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-17 | EM 8 | 95050 | 0.50 | 6.5 | 12.5 | 13.0 |
| ARNG12-001-10-18 | EM 8 | 395051 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-10-19 | EM 8 | 395052 | 0.00 | | < 6. | 3 μg |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

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1-866-RESI-ENV www.reilab.com

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| als | TOTAL CFM | 2670.8 | N/A | N/A | NIA | NIA | NIA | N/A | N/A | NIA | NIA | NIA | NIA | AIN | | NIA | NIA | NIA | NIA | NIA | N/A | N/A | NIA | N/A | N/A | N/A | NIA |
|------------------------|----------------|---------|-----|-----|-----|-----|-----|-----|-----|------------|-----|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|------|-----|
| Totals | Total CF | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Size | WIDTH | 3 | | | | | | | | The second | | | | | | | | | | | | | | | | 1111 | |
| Calculations Vent Size | LENGTH | 96 | | | | | | | | | No. | | | | | | | | | | | | | | | | |
| | FPM | 1335.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | No. of Rdds | 5 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Total | 6677 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| | 5 | 1291 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 4 | 1357 | | | | | | | | | | | | | | | | | | | | | | | | | |
| Readings | 3 | 1416 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 2 | 1287 | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 1 | 1326 | | | | | | | | | | | | | | | | | | | | | | | | | |
| tion | VENT No. | + | | | | | T | | | | | | | | | | | | | | 1 | | | | | | |
| Location | ROOM | Kitchen | | | | | | | | | | | | | | | | | | | | | | | | | |

Ventilation. . orksheet

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Illumination Study

Luminescence in Foot-candles (FC)

ARNG Grandview Readiness Center

| ample Location | Description | FC |
|----------------|--------------------|------|
| Kitchen | Range Hood (Left) | 18.8 |
| Kitchen | Range Hood (Right) | 22.5 |
| | | |
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| 1. | Date Prepared: July 24, 2012 (UIC) | | |
|----------|--|--|--|
| 2. No | Names (and company name) of Personnel Conducting IH SA | | |
| 3. | Facility Name and Brief Summary of Primary Activities Conducted at Facility: Grandview RC (ARNG12- 001-10) <u>Chemical, Biological, Radiological, Nuclear decontamination training, prep for drill wk. ends.</u> recruiting, and training for funeral honors | | |
| ١. | Facility Address: 800 Wallace Way, Grandview, WA 98930 | | |
| | Primary Unit Assigned to Facility:792 nd Chemical Company (Heavy) – Det. 1 & 2 | | |
| 5. | Co-Tenant Units Assigned or Working Within Facility (LIST ALL): <u>None</u> | | |
| 8 8 | Square Feet Area of Facility: 24,000 sq. ft. (DOC) 1994 | | |
| 5. | Work Schedule: 0800 – 1630 M - F | | |
| | Number of Work Bays: 2 Not Used | | |
| 0. | Equipment Density and Type: N/A | | |
| | a. List Nomenclature Serviced or Maintained at Facility: <u>N/A</u> | | |
| | b. List Total Number for Each Nomenclature Services or Maintained at Facility: N/A | | |
| 1. | Total Number of Personnel: 7 full-time staff, 124 soldiers assigned | | |
| 2. | No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 3 AGR | | |
| 13. | No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): | | |
| 4. | Total Number of Personnel Enrolled in the Hearing Conservation Program: N/A | | |
| 15. | Total Number of Personnel Enrolled in the Respiratory Protection Program: N/A | | |
| 16. | Total Number of Personnel Enrolled in the Medical Surveillance Program: N/A | | |
| 17. | Total Number of Personnel Enrolled in the Vision Program:N/A | | |
| 18. | Facility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to: Non-Responsive 09) 469 - 4651 | | |
| 19. | Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: N/A | | |
| | | | |

20. Facility Telephone Number: (509) 882 - 3366

ARNG Grandview RC Survey (To Be Included In Report)

| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | Yes |
|--|--|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | None, offsite at YTC Firing Range |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | Yes, converted. inspection. Still had lead. |
| Is there any peeling paint ? Take bulk sample if able. | No, but worn |
| Are there any signs of water damage or mold? | Interior throughout |
| Any suspected ACM ? Where and what condition is it in. Bulk sample if able. | None |
| Quality of housekeeping | Above average |
| HVAC maintenance plan in place? | N/A – State maintains |
| Overall condition of HVAC system | N/A – State maintains |
| Obtained CO2, Temp, RH monitoring | N/A |
| 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. | Lockers organized |

| | Vac |
|--|---|
| 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 | Yes |
| Annual fire extinguisher inspections tags current | Yes |
| Arc eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | Yes, in battery room |
| 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) | N/A |
| Any Photo labs | N/A |
| Any hazardous noise sources | N/A, None |
| Light levels checked throughout building | Good |
| Breaker panels properly labeled with no exposed wiring | Yes |
| Check building occupancy | 1.7 Full Time |
| How many military personnel, how many civilian personnel What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | 2. Chemical Unit |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | Quincineras, Weddings, Church Functions |
| Obtain two lead air samples | Only upon request, N/A |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | 96" x 3" or 8' x 3" Not connected |
|--|-----------------------------------|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | Yes |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Yes |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Yes |
| Name of Armory, POC , phone # , address and organizations in Armory | Non-Responsive 509) 728 - 6700 |
| | (Add Checklist to Report) |
| (Add Checklist to Report) | |

-

MASTER MSDS

792ND CHEMICAL COMPANY GRANDVIEW ARMORY

2-Aug-12

| MSDS # | NSN/PRODUCT # | UI | NOUN |
|--------|------------------|----------|--|
| 1 | 4476081 | 1 QT | CREW SUPER BLUE MILD ACID BOWL CLEANER |
| 2 | 170016 | 1 GAL | WAXIE GERMICIDAL BLEACH |
| 3 | 7930-00-926-5280 | 16 OZ | ALL PURPOSE CLEANER |
| 4 | 7930-01-373-8849 | 22 OZ | POWER GREEN ALL PURPOSE CLEANER |
| 5 | 3312 | 10 OZ | METER MIST AIR FRESHNER |
| 6 | 1980094780 | 13 OZ | POTPOURRI SPRAY |
| 7 | SL403-C-7\98 | 2.64 GAL | ELCIPSE HARD FLOOR SEALER |
| 8 | SEB8301 | 1 GAL | WAX AND FINISH REMOVER |
| 9 | 190039016 | 12 OZ | MULTI PURPOSE CLEANER DEGREASER |
| 10 | 81238198530 | 1 QT | MUTICLEANER DEGREASER |
| 11 | 4122398 | 1 GAL | FLOOR STRIPPER |
| 12 | SEB8001 | 1 GAL | FLOOR FINISH AND SEALER |
| 13 | D15404531 | 1 QT | AMMONIA-D GLASS CLEANER |
| 14 | SEB61048HM | 64 OZ | GLASS CLEANER CONCENTRATE |
| 15 | 43097/9206 | 1 GAL | WALL GLIDE PLUS SOIL REMOVER |
| 16 | REMOVED | | |
| 17 | MT8028B | 1 GAL | ANTI-FREEZE/ COOLANT |
| 18 | 6850-01-464-9125 | 1 GAL | ANTI-FREEZE/ COOLANT |
| 19 | 9150-00-252-6383 | 1 QT | HYDRAULIC FLUID |
| 20 | 8030-01-262-3560 | 10.5 OZ | FLANGE/GASKET ELIMINATOR |
| 21 | 6810-00-286-3793 | 1 GAL | BATTERY WATER |
| 22 | A00437 | 13.5 OZ | WASK AND HORNET KILLER |
| 23 | 10016 | 16 OZ | MULTI-PURPOSE ANTI-RUST |
| 24 | 2B108593 | 1 GAL | BRAKE FLUID |
| 25 | 013534799 | 1 QT | MULTI-PURPOSE TRANSMISSION FLUID |
| 26 | 9150-01-197-7693 | 14 OZ | GREASE AUTOMOTIVE ARTILLERY |
| 27 | REMOVED | | |
| 28 | REMOVED | | |
| 29 | REMOVED | | |
| 30 | REMOVED | | |
| 31 | 41333513409 | 1 EA | DURACELL PRO CELL |
| 32 | 7557721217 | 10 OZ | WAGON RED SPRAY PAINT ENAMEL |
| 33 | 3885903 | 12 OZ | BLACK SPRAY ENAMEL |
| 34 | REMOVED | | |

| 22 S 21 1 20 | NSN/PRODUCT # | บเ | NOUN |
|--------------|------------------|----------|--|
| 35 | 09235420553 | 13 OZ | ACRYLIC LACQUER |
| 36 | 09235420805 | 10 OZ | SO SURE GENERAL PURPOSE ENAMEL |
| 37 | 0923542095 | 10 OZ | AEROSOL LACQUER |
| 38 | 03-2025 | 1 EA | BATTERY ULTIMATE LITHIUM |
| 39 | 6135-00-985-7846 | 1 EA | BATTERY ALKALINE |
| 40 | 6810-01-382-2904 | 16.3 MIL | ISOPROPYL ALCOHOL |
| 41 | 9150-01-053-6688 | 1 GAL | ROYAL LUBRICANT PRESERVATIVE |
| 42 | REMOVED | | |
| 43 | 8010-00-LP00271 | 12 OZ | RUST TOUGH PREVENTATIVE ENAMEL |
| 44 | REMOVED | | |
| 45 | 2450401910 | 12 OZ | KRYLON TRUE BLUE INTERIOR EXTERIOR PAINT |
| 46 | REMOVED | | |
| 47 | 0923542060 | 10.5 OZ | SO SURE GREEN AEROSOL ENAMEL |
| 48 | REMOVED | | |
| 49 | 020066284381 | 12 OZ | FAST DRY ALL-PURPOSE ENAMEL |
| 50 | 02006619428 | 11 OZ | RUST OLEUM HIGH VISIBILTY LACQUER |
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25.July 12

ARMY NATIONAL GUARD

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Industrial Hygiene Site Assistance Visit

Grandview Armory Indoor Firing Range 800 Wallace Way Grandview, WA 98930

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

(916) 854-1491

Posted to NGB FOIA Reading Room May, 2018

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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

10 September 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Grandview Indoor Firing Range, 800 Wallace Way, Grandview, WA 98930

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit for the Grandview Indoor Firing Range, 800 Wallace Way, Grandview, WA conducted on 25 July 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 Grandview Indoor Firing Range, Grandview, WA on 25 July 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. None

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>Better Housekeeping practices</u> in the <u>Indoor Firing Range (IFR) & Armory</u> areas should be addressed <u>cleaned regularly</u> to capture residual lead dust from converted IFR or other heavy metals

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit for the Grandview Indoor Firing Range, 800 Wallace Way, Grandview, WA conducted on 25 July 2012.

produced by weapons cleaning or vehicle maintenance. Utilize the Clean-Up SOP provided in this report to clean armory and weapons cleaning areas after every episode. (para. 4.2.1) (RAC 3)

b. Indoor Firing Range (IFR) area should be thoroughly cleaned. Stored items within IFR should be cleaned and taken out of area and returned after IFR area is thoroughly cleaned using the Clean-up SOP provided within this SAV report. (para. 4.1.1) (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.

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.

 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

and submit for review and obtain approval BEGTI AWAISABLE IDDREStrial 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>Washington</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 undersigned at (916) 854-1491 or via email at

Non-Responsive



NGB, IHSW, CV Industrial Hygiene



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

ARNG-CSG-P

09 SEP 2012

MEMORANDUM FOR Non-Responsive, The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Grandview Indoor Firing Range at 800 Wallace Way, Grandview, WA on 25 July 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Grandview Indoor Firing Range, Grandview, WA on 25 June 2012.

| 4 The technical point of contact is Non- | Responsivet (775) 7 | 71-3956 | For follow up |
|---|----------------------|---------|---------------|
| 4. The technical point of contact is Non- information, contact the Occupational St OHN Non-Responsive | afety & Health Offic | Ion-R | esponsive |
| OHNNON-Responsive | (253) 912-3832. | | |



Chief, Industrial Hygiene

| CF | | the starter | |
|-------|--------------------|-------------|------|
| Chief | Occupational Healt | Non-Respon | sive |

| DSS. Non-Responsiv | 😝0 Fairview Dr, Carson City, NV 89701 |
|--------------------|---|
| CFMC |) 2460 Fairview Dr, Carson City, NV 89701 |
| ASO, | I), 20,000 Army Aviation Dr, Reno, NV 89506 |

CF w/encl

OHN, Non-Responsive 460 Fairview Dr, Carson City, NV 89701 Facility Supervisor, NOLL-Responsive 0,000 Army Aviation Dr, Reno, NV 89506 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

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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.
- 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. 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)
 - 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 Services SITE ASSISTANCE VISIT



Army National Guard – Grandview IFR 800 Wallace Way Grandview, WA 98930

Prepared for:



By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-9

Posted to NGB FOIA Reading Room May, 2018

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Follow-Up IH SAV July 25th, 2012

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Cole & Associates

ARNG12-001-9

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Follow-Up IH SAV July 25th, 2012

1.0 EXECUTIVE SUMMARY

On July 25th, 2012, Consulting, Inc. conducted a follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Grandview Indoor Firing Range (IFR) located at 800 Wallace Way, Grandview, WA 98930.

The primary point of contact for information gathered during this survey was **Non-Responsive** at (509) 728-6700. The survey was conducted at the direction of **Non-Responsive** of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a thorough inspection of the indoor firing range and surrounding areas.

The primary purpose of this IH SAV was to determine the status and observe the current condition of the indoor firing range; to collect lead dust-wipe samples in and around the IFR and to make any recommendations for additional corrective actions or follow-up work to be completed.

A lead dust wipe sampling plan was prepared for the IFR to ensure residual lead dust is at acceptable levels. These areas included the IFR, the IFR foyer/storage room (now used as a gym), the bullet trap entrance door and the drill hall floor at the entrance to the IFR. Currently all lead levels are at acceptable levels with the exception of sample #9 which was at 321 µg/ft².

The firing range has been recently converted by the Amec Company however it is unknown if proper protocol was followed in clearing the area for re-entry. Consequently, a Lead Clearance Inspection was conducted on June 15th, 2012 by the State of Washington Regional Industrial Hygienist, **Consequently** Although the IFR passed the clearance inspection overall as the dust wipe sample results were below 200 µg/ft², there were still significant lead levels in the area that had been newly cleaned and encapsulated.

1.1 Recommendation 4.1.1

All items must be removed from the converted Indoor Firing Range and all items possibly contaminated by lead dust should be thoroughly cleaned. Items may not be returned to the area until the IFR is properly cleaned.

1.2 Recommendation 4.2.1

Housekeeping Practices need to be improved as evident by the migration of lead dust. The floor area inside the IFR should be thoroughly cleaned, utilizing the SOP for Armory Clean-up as the lead levels are over the recommended level of 200 µg/ft2.

Page 2

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Follow-Up IH SAV July 25th, 2012

2.0 INTRODUCTION

The Grandview Armory supports the 792nd Chemical Company (Heavy)- Det1&2 with 124 members assigned to the unit. The UIC (unit identification code) is Non-Responsive this facility is under the command of AONON-Responsive Currently there are no co-tenants.

This facility employs 7 full time guard members on a day to day basis and houses up to 80 members on drill weekends which are once a month. The armory was constructed from 1992-1994 and is approximately 24,475 square feet.

The armory has general offices and administrative areas, to include command and administrative offices, several classrooms, one arms vault, male & female latrines with showers, a locker room, a boiler room, janitorial supply room, maintenance office, tool room, POL storage and a kitchen

There are also two maintenance bays, a battery room with an eye wash station/deluge shower, a flammable storage room with an outside entrance, and a POL storage area which reportedly are used for training purposes only.

The building is rented out to civilians for various functions including Quinceaneras, weddings, church functions, and various sporting clubs for practice and events. The Guard also has special occasion gatherings for personnel and families.

Weapons are stored in the arms vault within the building, however cleaning and handling of the weapons is said to be performed at the Yakima Training Center on drill weekends.

Findings in this report were obtained by observations at the facility, previous inspection reports, and through interviews with personnel regarding the firing range.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

- Section 2 Introduction
- Section 2.3- Recurring Observations
- Section 3 Survey Procedures
- Section 4 Survey Observations and Findings
- Section 5 Limitations and Approvals

Cole & Associates

Page 3

ARNG12-001-9

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 521 of 980

Follow-Up IH SAV July 25th, 2012

2.3 Recurring Observations

Information was gathered from previous IFR reports and further observations were gathered from interviews and conversations with facility personnel. An indoor Firing Range Assessment was performed in June of 2007 indicating recurring negative issues with ventilation, lighting, equipment, PPE, safety compliance, and general safety.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including the indoor firing range, IFR storage room, IFR restroom and hallway. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust*. The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Indoor Firing Range

The facility Indoor Firing Range (IFR) has been recently converted by AMEC Co who subcontracted the work out to Thermatech Company in Tacoma, WA. The conversion included the removal of the backstop, ventilations systems, cleaning, and encapsulation.

A clearance inspection was performed by the State of Washington Regional Industrial Hygienist Non-Responsive on June 15th, 2012 following conversion activities and although paperwork could not be produced at the time of the inspection, it was provided to my office on August 29th, 2012. Although the area passed the inspection, there were still significant lead levels found at that time.

On July 25th 2012, Cole & Associates IH inspector confirmed all of the above mentioned IFR components (ventilation, backstop, etc.) had been removed from the IFR. All areas in and around the firing range appeared clean for the most part with the exception of the ceiling. The ceiling had large pieces of peeling paint hanging down that had been recently painted. It did not appear that the ceiling had been scraped, wiped down, cleaned, or encapsulated in any way prior to encapsulation and painting activities.

Cole & Associates

Page 4

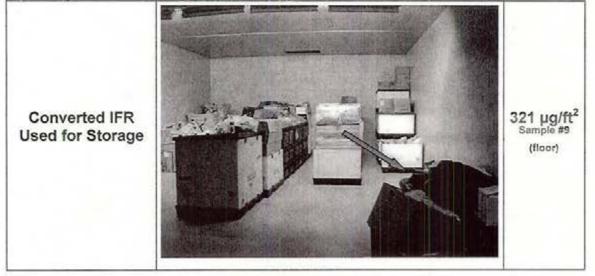
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Follow-Up IH SAV July 25th, 2012

Currently the IFR is being used for storage.



Thirteen dust wipe samples were taken on July 25^{th} , 2012 (IH SAV) and all lead levels were below the recommended level of 200 µg/ft2 with the exception of sample #9 which is 321 µg/ft².

4.1.1 Recommendation

All items must be removed from the converted Indoor Firing Range and all items possibly contaminated by lead dust should be thoroughly cleaned. Items may not be returned to the area until/unless the IFR is properly cleaned.

4.2 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.2.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

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Follow-Up IH SAV July 25th, 2012

| Sample Number | Location | Results (µg/ft ²) |
|--|--|----------------------------------|
| ARNG12-001-9-1 | IFR Firing Line Floor | 16.0 |
| ARNG12-001-9-2 | IFR South Wall middle | BRL |
| ARNG12-001-9-3 | IFR on equipment moved into room | BRL |
| ARNG12-001-9-4 | IFR West end Floor middle | BRL |
| ARNG12-001-9-5 | IFR North Wall middle | BRL |
| ARNG12-001-9-6 | SE end Floor | BRL |
| ARNG12-001-9-7 | Field Blank | BRL |
| ARNG12-001-9-8 | IFR Entrance Door (drill floor) | 13.5 |
| ARNG12-001-9-9 IFR NW Floor POSITIVE | | 321 µg/ft ² |
| | Gym (next door to IFR) Floor | BRL |
| ARNG12-001-9-10 | | Unit |
| ARNG12-001-9-10 ARNG12-001-9-11 | IFR NW Corner (side by side) Floor | 21.5 |
| | IFR NW Corner (side by side) Floor IFR NW Corner (side by side) Floor | 268201V |

Table 4.2.A - Lead Dust-Wipe Results

All areas tested resulted in dust lead levels below the recommended level of 200 µg/ft² with the exception of sample #9.

4.2.1 Recommendation

Housekeeping Practices need to be improved as evident by the migration of lead dust. The floor area inside the IFR, should be thoroughly cleaned, utilizing the SOP for Armory Clean-up as the lead levels are over the recommended level of 200 µg/ft².

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Follow-Up IH SAV July 25th, 2012

5.0 LIMITATIONS AND APPROVALS

5.1 Technical Assistance

Contact Non-Responsive of the Southwest Regional Industrial Hygiene Office, (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

Contact the State Safety and Occupational Health Office and/or the State Industrial Hygiene Technician, Non-Responsive at (253) 912-3181, should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

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Follow-Up IH SAV July 25th, 2012

Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| IH Technician: | Non-Responsive | <u>9-10-12</u> Date |
|-----------------------|---|------------------------|
| Quality Assurance: | Cole & Associates Training & Consulting, Inc. | 9/10/12 |
| | Cole & Associates Training & Consulting, Inc. | Date |
| IHSW Program Manager: | Non-Responsive | |
| | NGB- Industrial Hygiene Southwest | Date |

Cole & Associates

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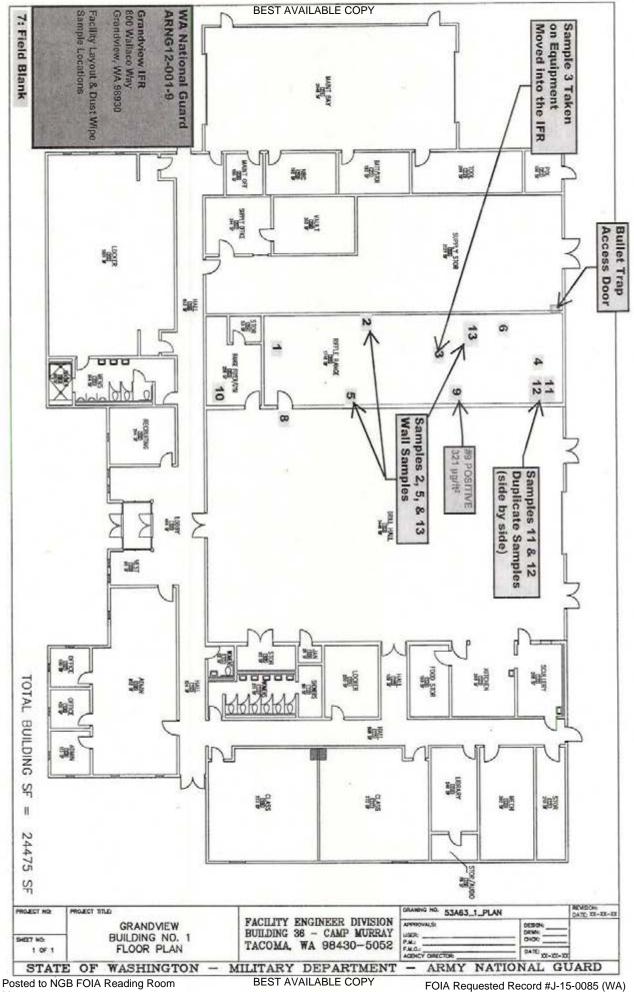
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| H. M | |
| 2010 | |

Industrial Hygiene Southwest

Violation inventory Log LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS ARNG Grandview IFR

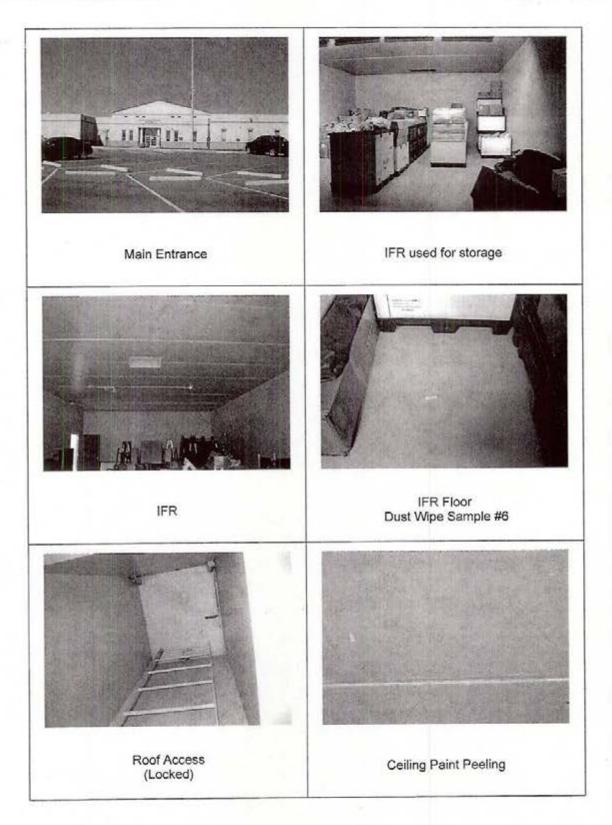
| CONTROL | | | | CODDECTIVE ACTIONS | SUSDENSE | ACTION | Fatimated | DATE | and the second se |
|--------------|---|-----------|-----|--|----------|-----------|-----------|-----------|---|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abstement Plan) | DATE | OICINCOIC | Cost(s) | CORRECTED | REFERENCES |
| NAGRA-072612 | WAGRA-072512- The indoor fring range is autorety being used for storage. | 194 I | | All items in ust be removed from the converted indeor Fring Range and all items contaminated by lead dust should be interrupt reimmed. Mens may often intumed to the area until the IFR is properly diamed. | | | | | NGR 385-15, Section 2.3(a) & NGP 420-15 |
| WAGRA-072612 | WAGRA-072512 The lead dust levels exceeded 4.2.1 µg/#2. | IFR Floor | 6 | Housekeeping practices need to be improved as a vident by the migration of lead dust. The floor area inside the IFR should be thoroughly downed, utilizing the SOP for Armory Clasm-up to SOP for Armory Clasm-up to prevent further migration of these contaminants | | | | | 25 CFR 1910.1025. NG PAM 420-15 & Prudent Industrial Hygiene Practices |



Released by National Guard Bureau Page 528 of 980

May, 2018

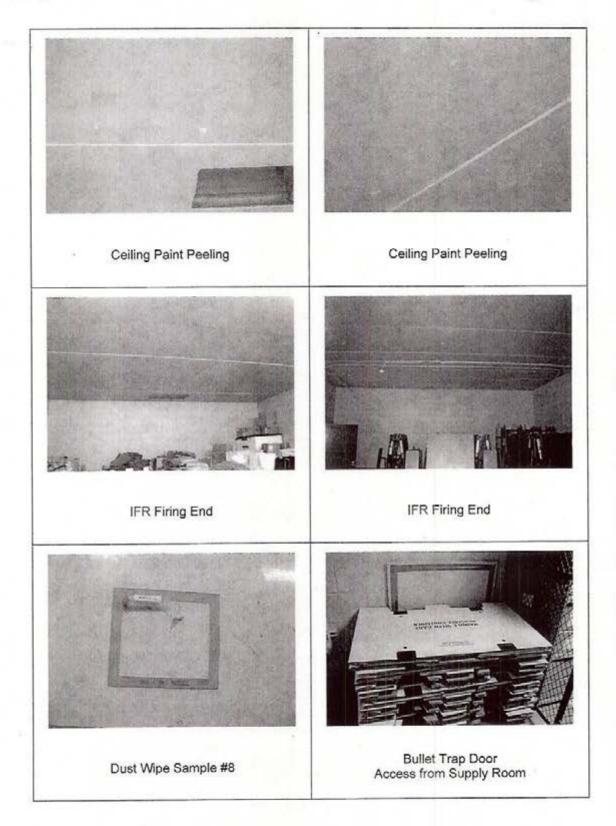
ARNG12-001-9 Grandview IFR IH Site Assistance Visit Site Photographs July, 24th 2012



Page 1

ARNG12-001-9 Grandview IFR IH Site Assistance Visit

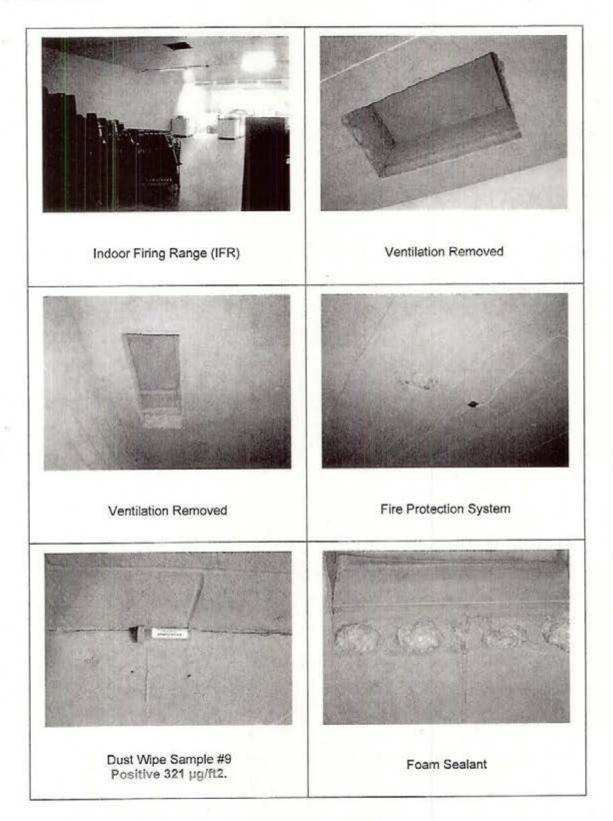
Site Photographs July, 24th 2012



Page 2

ARNG12-001-9 Grandview IFR IH Site Assistance Visit

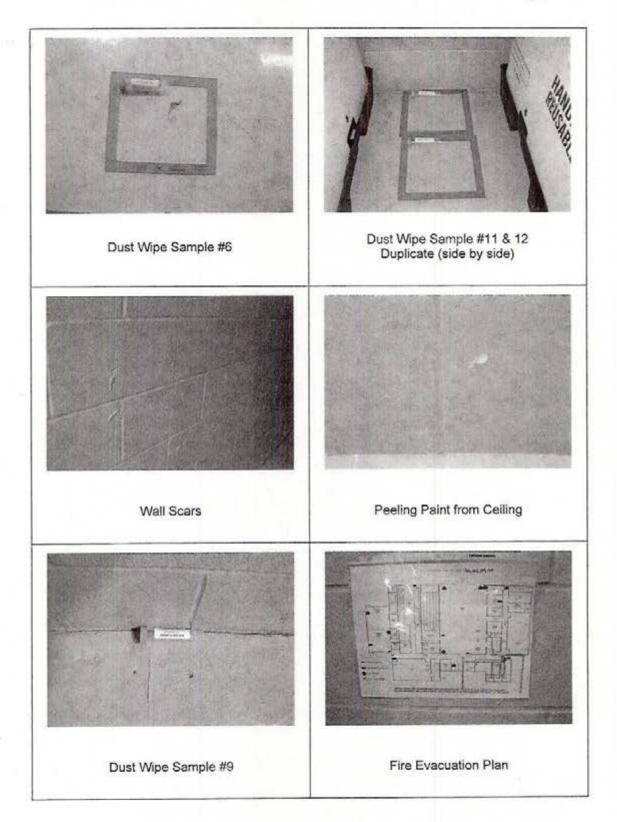
Site Photographs July, 24th 2012



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ARNG12-001-9 Grandview IFR IH Site Assistance Visit

Site Photographs July, 24th 2012



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RESERVOIRS ENVIRONMENTAL, INC. 5801 Logan St., Suite 100

Denver CO 80216

TABLE ANALYSIS:

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 241267-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-9 |
| Client Project Description: | Grandview IFR |
| Date Samples Received: | July 31, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | August 1, 2012 |

| Client ID Number | Lab ID Ni | umber | Sample Area | LEAD (µg) | Reporting Limit | LEAD CONCENTRATION |
|--|--------------|--------|----------------|--------------|--------------------|-----------------------|
| 10 () 10 | | | (sq.ft.) | 1000 | $(\mu g/ft^2)$ | (µg/ft ²) |
| ARNG12-001-9-1 | EM | 895067 | 0.50 | 8.0 | 12.5 | 16.0 |
| ARNG12-001-9-2 | EM | 895068 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-3 | EM | 895069 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-4 | EM | 895070 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-5 | EM | 895071 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-6 | EM | 895072 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-7 | EM | 895073 | 0.00 | | < 6.3 | βµg |
| ARNG12-001-9-8 | EM | 895074 | 0.50 | 6.8 | 12.5 | 13.5 |
| ARNG12-001-9-9 | EM | 895075 | 0.50 | 160 | 12.5 | 321 |
| ARNG12-001-9-10 | EM | 895076 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-11 | EM | 895077 | 0.50 | 10.8 | 12.5 | 21.5 |
| ARNG12-001-9-12 | EM | 895078 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-9-13 | EM | 895079 | 0.50 | BRL | 12.5 | BRL |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

P: 303-964-1986 F: 303-477-4275

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5801 Logan Street, Suite 100 Denver, CO 80216

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1-865-RESI-ENV www.rellab.com

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| | SFC Paris Purnhagen |
|-----|---|
| | Facility Name and Brief Summary of Primary Activities Conducted at Facility: <u>Grandview RC</u> (ARNG12-001-10) Chemical, Biological, Radiological, Nuclear Decontamination Training, prep for IDT Recruiting, and Funeral Honors Training |
| | Facility Address: 800 Wallace Way, Grandview, WA 98930 |
| | Primary Unit Assigned to Facility: 792 nd Chemical Company (Heavy) – Det. 1 & 2 |
| | Co-Tenant Units Assigned or Working Within Facility (LIST ALL): None |
| | Square Feet Area of Facility: 24,000 sq. ft. (DOC) 1994 |
| | Work Schedule: 0800 – 1630 M - F |
| | Number of Work Bays: 1 (used for training) |
| 199 | Equipment Density and Type: <u>N/A</u> |
| | a. List Nomenclature Serviced or Maintained at Facility: N/A |
| | b. List Total Number for Each Nomenclature Services or Maintained at Facility: N/A |
| | Total Number of Personnel: 7 Full-time staff, 124 soldiers Assigned |
| 2. | No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 3 AGR |
| 3. | No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): |
| | Total Number of Personnel Enrolled in the Hearing Conservation Program: N/A |
| | Total Number of Personnel Enrolled in the Respiratory Protection Program: N/A |
| i. | Total Number of Personnel Enrolled in the Medical Surveillance Program: N/A |
| | Total Number of Personnel Enrolled in the Vision Program: N/A |
| 3. | Eacility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to: Non-Responsive)9) 469-4651 |
|). | Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: N/A |

COLE & ASSOCIATES TRAINING & CONSULTING, INC.

ENGINEERING, HEALTH, SAFETY, AND ENVIRONMENTAL

25 July 2012

US Army National Guard Bureau Industrial Hygiene Southwest 10510 Superfortress Ave, Suite C Mather, CA, 95655

Subject: ARNG12-001-9 Grandview IFR Recommendations

To Whom It May Concern:

Indoor Firing Range

 All items must be removed from the converted Indoor Firing Range and all items possibly contaminated by lead dust should be thoroughly cleaned. Items may not be returned to the area until the IFR is properly cleaned (4.1.1)

Lead Dust

 Housekeeping Practices need to be improved as evident by the migration of lead dust. The floor area inside the IFR should be thoroughly cleaned, utilizing the SOP for Armory Clean-up as the lead levels are over the recommended level of 200 µg/ft2.(4.2.1).



Cole & Associates Training & Consulting, Inc.

Cole & Associates Training & Consulting, Inc. + 18062 72nd Avenue South, Kent, WA 98032 (425) 793-5505 + (425) 793-5552 Fax + 1-877-455-BEAR + <u>www.ctcbear.com</u>



6 oct 14

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

Kent Armory 24410 Military Road South, Bldg. 501 Kent, WA 98032

10510 Superfortress Ave, Suite C, Mather, CA 95655

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 536 of 980 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



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

ARNG-CSG-P

21 NOV 2015

MEMORANDUM THRU Washington Army National Guard, ATTN: NON-Responsive Occupational Health Manager (OHM), Bldg. 6224, 2n Division Dr, JBLM, WA 98433

FOR Commander, Kent Armory, 24410 Military Road South, Bldg. 501, Kent, WA 98032

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for Kent Armory, 24410 Military Road South, Bldg. 501 Kent, WA 98032, conducted on 6 OCT 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 Kent Armory 24410 Military Road South, Bldg. 501 Kent, WA on 07 OCT 2014.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the Industrial Hygienist report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached Industrial Hygiene 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. SFC Ryan Meeks efforts assisting the conducting Industrial Hygiene Staff during this IHSAV. He provided access to the areas of the facility and the details within this report are a direct result of the assistance and efforts.

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. During this IHSAV the Kent Reserve Center (RC)/Armory was being demolished. There were no significant findings or observations made.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for Kent Armory, 24410 Military Road South, Bldg. 501 Kent, WA 98032, conducted on 6 OCT 2014.

6. For additional information please contact the NGB-IHSW office at (916) 854-1491 or via email at Non-Responsive



| Industrial Hygiene Southwest | Violation Inventory Log | JLE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS | |
|------------------------------|-------------------------|--|--|
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|---|---|-------------|-----|--|-----------|-----------|-----------|-----------|--------------------------|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abstement Plan) | DATE | DICINCOIC | Costlel | CORFECTED | REFERENCES |
| closed | | | | fuer a visuance | | | lahonn | | |
| | | | | | | | | | |
| WAKA501- Den 100714-Exec. has Summary | Demolition of this building has occurred. | Armory None | | Observations noted during this Industrial Hygiene Site Assistant Visit | | | | | NGB, OSHA Regulations |

Industrial Hygiene Site Assistance Visit Kent Armory, Building 501 Kent, Washington October 6, 2014





www.nesglobal.net



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- D Historical Floor Plan
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- G Facility Information
- H Additional Supporting Documentation

IHSAV Kent Armory, Building 501 Posted to NGB FOIA Reading Room May, 2018 NES, Inc. NES Job Number: 013.1H1716.40

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EXECUTIVE SUMMARY

On October 6, 2014, Non-Responsive Certified Industrial Hygienist (CIH), and Interponsive Industrial Hygiene Specialist, both with Network Environmental Systems, Inc. (*NES*), conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Kent Armory, Building 501, located at 24410 Military Road, South in Kent, Washington. The primary point of contact (POC) for information gathered during this survey was Non-Responsive who may be reached by phone at (253) 912-3180 or by email at Non-Responsive

The objectives of this IHSAV were to:

- Visually verify condition of facility; and
- · Report conditions observed.

The report that follows this Executive Summary should be read in its entirety because it includes important information not included in this summary. Appendices are limited where information was not applicable as the facility was in the process of being demolished during the IHSAV.

Commendables: Non-Responsive eserves accolades for assisting with this IHSAV. provided access to the areas once occupied by Kent Armory, Building 501. The details within this report are a direct result of the assistance provided by Non-Responsive

1.0 INTRODUCTION

On October 6, 2014 CIH, and Shauna Byron, Industrial Hygiene Specialist, both with *NES*, conducted an IHSAV at the Kent Armory, Building 501, located at 24410 Military Road, South in Kent, Washington. The primary POC for information gathered during this survey was **Non-Responsive**, who may be reached by phone at (253) 912-3180 or by email at ryan.d.meeks.mil@mail.mil.

1.1 Objectives

The primary objective of the IHSAV was to document that the facility was no longer present. Conditions at the Army National Guard (ARNG) site were documented accordingly. This IHSAV will serve to establish the closure and demolition of Kent Armory, Building 501.

1.2 Scope of Work

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

- Visually verify condition of facility; and
- Report conditions observed.

Note: Appendices are limited where information was not applicable as the facility was in the process of being demolished during the IHSAV.

Page 2 of 10 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.IH1716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 544 of 980

2.0 PROCESS DESCRIPTION

The Kent Armory, Building 501 was in the process of demolition during the IHSAV. The building had been devastated and was being removed from the site; a backhoe was loading concrete rubble for disposal during the IHSAV. The POC was unaware that the demolition was occurring prior to the IHSAV. It was unknown why demolition of the building occurred and what the site would be used for when cleared.

The site is located east of Interstate 5 on the National Guard Installation. The Kent Armory, Building 403 was adjacent to the north and adjacent to the west was the site were Kent Armory, Building 500 once stood; at the time of the IHSAV it had been demolished and two (2) storage buildings had been built in its place. There was a school adjacent to the northeast and residential areas to the south.

NES observed records indicating one (1) previous IHSAV had been conducted at the Armory on 4 March 2010 by Cole & Associates Training & Consulting, Inc. *NES* was provided a copy of the full report, and reviewed the Violation Inventory Log for the previous IHSAV conducted. The findings from the previous IHSAV are no longer relevant.

NES. Inc. NES Job Number: 013.IH1716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 545 of 980

3.0 METHODS

NES did not assess conditions or operations using quantitative means during this IHSAV as no facility was present.

3.1 Equipment Used

No equipment was used for this survey.

3.2 Quality Assurance

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

- Using appropriately educated & experienced staff who receive continuing education;
- · Documentation of pertinent field and sampling information;
- · Peer review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to documented method requirements, in particular to NIOSH & OSHA methods, & 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;
- 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 SAMPLING RESULTS

NES did not assess conditions or operations using quantitative means during this IHSAV as no facility was present, therefore no sampling results will be discussed.

HSAV Posted to NGB FOIA Reading Room May, 2018 Page 5 of 10 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.1111716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 547 of 980

5.0 FACILITY SYSTEMS & HAZARDS

The Kent Armory, Building 501 was in the process of demolition during the IHSAV. The POC did not know whether asbestos was present, inspected, or abated during the demolition of Kent Armory, Building 501. There was no asbestos survey report and/or Asbestos Hazard Management Plan available for the site.

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6.0 TRAINING DOCUMENTS AND HAZARD ASSESSMENTS

A review of the facilities safety programs and training documents was not conducted during this IHSAV for no personnel were assigned to this facility. Additionally, hazard assessments were not performed during this IHSAV as no work activities were being conducted.

HISAV Kent Armory, Building 501 Posted to NGB FOIA Reading Room May, 2018 Page 7 of 10 BEST AVAILABLE COPY NES Inc. NES Job Number: 013.IH1716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 549 of 980

7.0 OBSERVATIONS

The Kent Armory, Building 501 was in the process of demolition during the IHSAV. The building had been devastated and was being removed from the site; a backhoe was loading concrete rubble for disposal during the IHSAV. Water was actively being used to minimize dust accumulation while site was being cleared. The conditions observed were documented in photographs, attached in Appendix C (Photo Log).

IHSAV Kent Armory, Building 501 Posted to NGB FOIA Reading Room May, 2018 Page 8 of 10 BEST AVAILABLE COPY NES Job Number: 013.IH1716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 550 of 980

8.0 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.

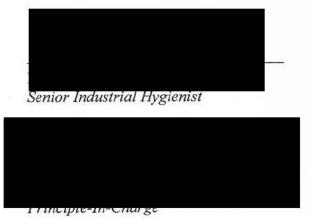
The procedures used in this investigation attempt to establish a balance between the competing goals of limiting investigative and reporting costs and time, and reducing the uncertainty about unknown conditions. Therefore, because the findings of this report were derived from the scope, costs, time, and other limitations, the conclusions should not be construed as a guarantee that all environmental or occupational hazards have been identified and fully evaluated. *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.

NES. Inc. NES Job Number: 013.IH1716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 551 of 980

9.0 PROJECT APPROVAL

This IHSAV was reviewed and approved by:



| March | 13, | 2015 |
|-------|-----|------|
| Date | | |

March 18, 2015 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey; please contact *NES* at 916-353-2360 of the Southwest Regional Industrial Hygiene Office, 916-854-1491. 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 10 of 10 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.IH1716.40 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 552 of 980

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), Various
- American National Standards Institute, Z358. 1-2009. 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

- AR 420-1, Army Facilities Management
- ARNG "Maintenance Shop Local Exhaust Ventilation Measurements", issued by Dated 14Nov2013,

American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), Various

- 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.

- MIL-STD-1472E, Illumination Level Standard
- NGR 385-15, National Guard Bureau, Policy and Responsibilities for Inspection, Evaluation and Operation of Army National Guard Indoor Firing Ranges, 3NOV2006

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

- TB MED 503, The Army Industrial Hygiene Program
- 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
- Title 40, Code of Federal Regulations (CFR), Protection of Environment, Part 262, Standards Applicable to Generators of Hazardous Waste.
- TM 5-810-1, Department of the Army, Heating, Ventilating, and Air Conditioning, 15 June 1991

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).

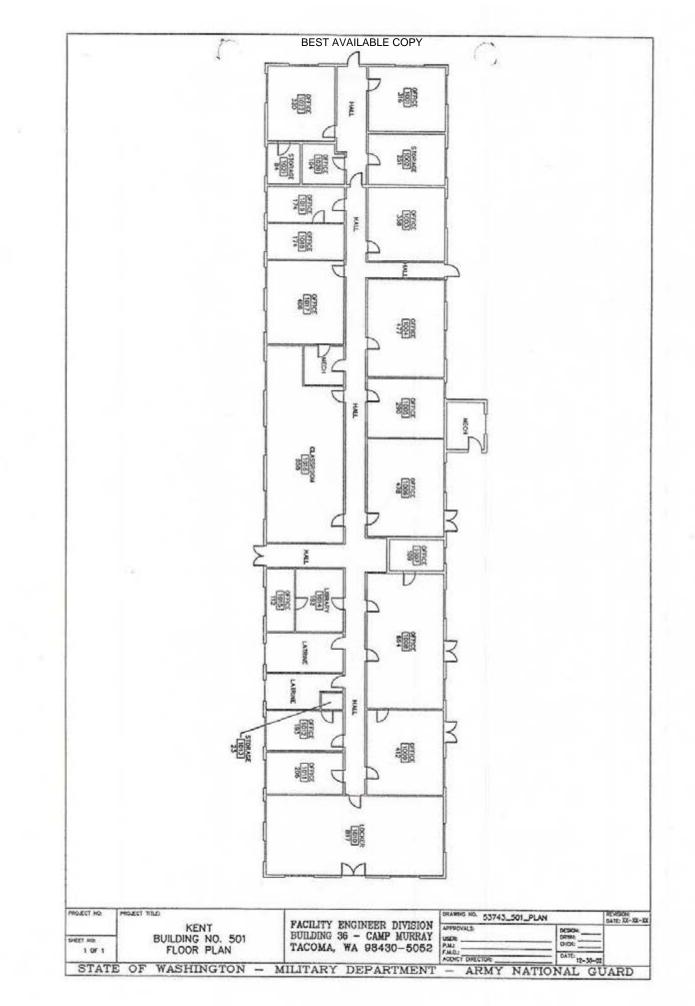
PHOTO LOG KENT ARMORY, BUILDING 501 KENT, WA OCTOBER 6, 2014



Photo 1: Vacant site with exposed dirt and concrete rubble pile where Kent Armory, Building 501 once stood; looking southeast.



Photo 2: Demolition occurring during the IHSAV. Water actively being used to minimize dust accumulation while concrete rubble was being removed; looking southeast.



| Building 501 | B. WEished |
|--|--|
| - Building was in process of being | - 0 14 - |
| Building was in process of being | i tomored from whe (loading) |
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Commendables:

provided access to the areas once occupied by Building 501; the last of the demolition (e.g. loading of concrete rubble) was taking place during the IHSAV.

0

Photo Log - Building 501

- 1. Vacant lot with exposed dirt & rubble pile where Building 501 once stood; looking southeast.
- Vacant lot with exposed dirt & concrete rubble pile where Building 501 once stood. Also shows active wetting of pile to minimize dust; looking southeast.

| Industrial Hygiene Southwest | Violation Inventory Log | LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS | |
|------------------------------|-------------------------|--|--|
|------------------------------|-------------------------|--|--|

Kent Armory, Bldg. 501, WA

| CONTROL | | | | CORRECTIVE ACTIONS | SUSPENSE | ACTION | Estimated | DATE | Contraction of the local division of the loc |
|-------------------------------------|---|-------------|-----|--|----------|-----------|-----------|-----------|--|
| NUMBER | HAZARD DESCRIPTION | SITE | RAC | (Abatement Plan) | DATE | OIC/NCOIC | Cost(s) | CORRECTED | REFERENCES |
| CLOSED | | | | | | | 200 | | |
| WAKA501- 100714-Exec. Summary | Demolition of this building has occurred. | Armory None | | No Significant Adverse Observations noted during this Industrial Hygiene Site Assistant Visit | | | | | NGB, OSHA Regulations |

Reference DA FORM 4754 VER: 15 OCT 2009



Facility Information Form Revised: December 4, 2013



| General Facility | Informati | ion | | Date(s) of F | revious IHSAVs: | 4 March 2010 |
|------------------------------------|---|-------------------------------|--|--|---|----------------------------------|
| IH(s): | | | | C | ate(s) of IHSAV: | 6 October 2014 |
| Facility Name: | Kent Arn | nory (Building | 501) | | | |
| Address: | Address: 24410 Military Road S. Kent, WA 98 | | | | | <u> </u> |
| Facility Comma | ander: | NA | | | | |
| | 8 | | | Name / | Phone Number / e | mail |
| Safety Officer: | | NA | | Nome / | Phone Number/e | mail |
| | | | 0 Main | | Sched: NA | Size of Facility: NA ft |
| No Person(s): (Include status – | NA AGR Fed | Admin: N | terre and the second | | | |
| and a second second | AGN, Fea | , reon., ibit, c | tate of contain | Co-Tenant(s): | | Build Date: |
| Unit(s): | | Include UIC if av | ailable | | List All | Renovation: |
| | | | | lished and in the | propose of remov | al; backhoe was loading concrete |
| Primary work activities at | NONE; | Building 501 ha | | | | |
| Facility: | : | | | | | |
| | 1 | | ¥. | | | |
| Written Health | & Safety | | | B (1) (| a contraction of the second | |
| Program | | Program Needed | Have Program | Date of Last Training | # Enrolled | Comments |
| Confined Space | | | | | | |
| Emergency Prep | paredness | | | | | |
| Hazard Commun | nication | | | | | |
| Hearing Conser | vation | | | | | |
| PPE | | | | | | |
| Respiratory Prot | tection | | | | | |
| Others (Bloodborn | e Pathogens | , Lock Out / Tag O | ut, Lifting Devices | s, Radiation, SOPs, etc |) – List on back | |
| Y = Yes | N = No | NA = Not Applica | able to this site | | | |
| Documents / R | ecords t | to Obtain | | | i. | |
| Facility | floor plan | / evacuation m | ap | | Hazardous Mate | rials inventory |
| | | serviced / mair | | | Personnel list | |
| | s IH repor | | | | Others (List): | |
| NA = Not / | Applicable 1 | to this site | | | | |
| Non – DoD Co | ntractors | S | and the second | and the second second | Sector Sector Sector | |
| Service | au an | Provider | | Ser | Contraction of the second s | Provider |
| Oil / Water S | Separator | 1 <u></u> | - 146 | Laur | | |
| Tools | | | | | Control ardous Waste | |
| Rags | | | | and the second | ne Maintenance | |
| Refuse | | (141-14)(171-14) | | | ie maintenariou | |
| Others: | | | | | | |

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) | NA – Facility was demolished recently; demolition was on-going during IHSAV with dust suppression being used (see photos) |
|--|---|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | NA |
| 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. | NA |
| Is there any peeling paint ? Take bulk sample if able. | NA |
| Are there any signs of water damage or mold? | NA |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | NA |
| Quality of housekeeping | NA |
| HVAC maintenance plan in place? | NA |
| Overall condition of HVAC system | NA |
| Obtained CO2, Temp, RH monitoring | NA |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | NA |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | NA |

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

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | NA |
|---|----|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | NA |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | NA |
| <u>Take photos</u> of outside of building, all sample points and any pertinent hazards or concerns. | NA |
| Name of Armory, POC, phone #, address and organizations in Armory | NA |
| (Add Checklist to Report) | |



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**

Moses Lake Armory 6500 32nd Avenue Moses Lake, WA 98937

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1491

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 565 of 980



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

10 September 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Moses Lake Armory, 6500 32nd Avenue, Moses Lake, WA 98937

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Moses Lake Armory, 6500 32nd Avenue, Moses Lake, WA conducted on 9 August 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 Moses Lake Armory, Moses Lake, WA on 09 Aug 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. None

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. Armory should be <u>cleaned regularly</u> to capture residual lead dust or other heavy metals produced by weapons cleaning or vehicle maintenance. Utilize the Clean-Up SOP provided in this report to clean

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Moses Lake Armory, 6500 32nd Avenue, Moses Lake, WA conducted on 9 August 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 <u>Washington</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 undersigned at (916) 854-1491 or via email at



NGB, IHSW, CIV Industrial Hygiene

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

ARNG-CSG-P

09 SEP 2012

MEMORANDUM FOR One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

The Adjutant General of Washington, 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Moses Lake Armory at 6500 32nd Ave, Moses Lake, WA on 09 Aug 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Moses Lake Armory, Moses Lake, WA on 09 AUG 2012.

| 4. The technical point of conta information, contact the Occup OHN | act is a second (775) 771-3956. For follow up ational Safety & Health Office, 53) 912-3832. | |
|--|---|--|
| | | |
| CF Chief, Occupational Health DSS, (CFMC ASO, | 0 Fairview Dr, Carson City, NV 89701 2460 Fairview Dr, Carson City, NV 89701), 20,000 Army Aviation Dr, Reno, NV 89506 | |
| CF w/encl OHN, Facility Supervisor, (I | Eairview Dr, Carson City, NV 89701 20,000 Army Aviation Dr, Reno, NV 89506 | |

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

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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.

- 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. <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.

 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 Services SITE ASSISTANCE VISIT



Army National Guard – Moses Lake Armory 6500 32nd Ave Moses Lake, WA 98937

Prepared for:

, Program Manager National Guard Bureau Industrial Hygiene Southwest

By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-12

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| Washington Army National Guar | d |
|-------------------------------|---|
| Moses Lake Armory | |

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Washington Army National Guard Moses Lake Armory Follow-up IH SAV August 8th, 2012

ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log | |
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Follow-up IH SAV August 8th, 2012

1.0 EXECUTIVE SUMMARY

On August 8th, 2012, and the properties of Cole & Associates Training & Consulting, Inc. conducted a follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Moses Lake Armory located at 6500 32nd Ave, Moses Lake, WA 98930.

The primary point of contact for information gathered during this survey was a second at (509) 766-6559. The survey was conducted at the direction of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walk-through survey of the facility including the drill floor, office areas, locker rooms, supply areas, weapons vaults, classrooms, and maintenance bay areas. Existing programs, i.e., respiratory protection, hazardous materials program, etc. were also reviewed for compliance.

The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual re-inspection.

A lead dust wipe sampling plan was prepared for the facility to ensure residual lead dust is kept to a minimum. These areas included the drill floor/assembly hall, weapons vaults, maintenance bays, classrooms, locker rooms, and any area where weapons are cleaned or handled. All lead levels are at acceptable levels.

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Follow-up IH SAV August 8th, 2012

2.0 INTRODUCTION

The Moses Lake Armory supports the B Company, 1st Battalion, 161st Infantry. The UIC (unit identification code) is the state of this facility is under the command of the current co-tenants in this facility include Recruiting, J-9 Employment Transition, and the Multi Agency Communications Center (emergency 911) who occupy a section of the building.

This facility employs 5 full time guard members on a day to day basis and houses up to 120 IDT members on drill weekends which are once a month. The armory was constructed in 1994 and the square footage of the facility is unknown.

The armory has general offices and administrative areas, to include command and administrative offices, several classrooms, one arms vault, male & female latrines with showers, a locker room, a boiler room, janitorial supply room, maintenance storage, tool room, and a kitchen.

There is also one maintenance training bay (through & through), a battery room with an eye wash station/deluge shower, a flammable storage room with an outside entrance, and a POL storage area which reportedly are used for training purposes only.

This facility has an IFR that has been recently converted and included the removal of the backstop and ventilation system. A separate IFR inspection/report was conducted the following day on August 9th, 2012. See Moses Lake IFR Report.

The building is rented out to civilians for various functions including weddings, parties and National Guard functions for personnel and families. A section of the building is also leased out to the local area 911 emergency agency.

Weapons are stored in the arms vault within the building and weapons are reported to be cleaned at the facility upon returning from Yakima Training Center on drill weekends. Areas that are used to clean weapons include the maintenance bays, drill floor, locker rooms, and classrooms.

Findings in this report were obtained by observations at the facility, previous inspection reports, and through interviews with personnel regarding the armory.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

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Follow-up IH SAV August 8th, 2012

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

Section 2 - Introduction

Section 2.3- Recurring Observations

Section 3 - Survey Procedures

Section 4 - Survey Observations and Findings

Section 5 - Written Programs and Approvals

Section 6 - Limitations and Approvals

2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility personnel. There were no major issues regarding recurring observations.

2.3.1 Lead Dust Hazards

Previous inspection reports indicate high lead dust levels.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, locker room, kitchen, classrooms, supply storage areas, and the weapons vault area. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust.* The collected wipe samples were placed in

clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials \ MSDS

MSDS binders are located in a book case in the main administration office to the west of the lobby. All products are listed by name and NSN numbers.

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A spot check of the chemical storage areas included the hazardous materials storage room located outside the maintenance bay at the rear of the building on the south side, the Butler building, and the janitorial closet. Chemicals were randomly pulled from shelves and the inspector found the MSDS information was easily accessed and the MSDS binders accurate. A current Hazardous Materials Inventory list was attached to the binder.

All areas were found to be organized, well maintained, and in excellent order.

There are two flammable storage lockers located in the Butler Building (long barn) which is used for unit storage. Both lockers are empty and were reportedly not used regularly.

4.2 Indoor Firing Range

The facility has an Indoor Firing Range (IFR) that was converted in February 2012. The conversion included the removal of the backstop, ventilations systems, cleaning, and encapsulation. A separate IFR inspection/report was conducted by Cole & Associates on August 9th, 2012.

4.3 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.3.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

| Sample Number | Location Floors & Tables | Results (µg/ft ²) |
|-----------------|------------------------------|----------------------------------|
| ARNG12-001-12-1 | Inside vault | BRL |
| ARNG12-001-12-2 | Outside vault | BRL |
| ARNG12-001-12-3 | Main entrance to drill floor | BRL |
| ARNG12-001-12-4 | Drill floor NW | BRL |

Table 4.3.A - Lead Dust-Wipe Results

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| Vashington Army National Guard Ioses Lake Armory | | Follow-up IH SAV August 8 th , 2012 |
|---|--------------------------------------|---|
| ARNG12-001-12-5 | Drill floor SW | BRL |
| ARNG12-001-12-6 | Drill floor SE | BRL |
| ARNG12-001-12-7 | Drill floor NE | BRL |
| ARNG12-001-12-8 | Drill floor (center) | BRL |
| ARNG12-001-12-9 | Classroom north end (table) | BRL |
| ARNG12-001-12-10 | Classroom south end (table) | 13.0 |
| ARNG12-001-12-11 | Lobby floor | 13.0 |
| ARNG12-001-12-12 | Men's locker room (table) | BRL |
| ARNG12-001-12-13 | Gym floor | 38.5 |
| ARNG12-001-12-14 | Classroom south end top of locker | BRL |
| ARNG12-001-12-15 | Classroom window sill (center window | w) BRL |
| ARNG12-001-12-16 | Field Blank | <6.25 |

All areas tested resulted in dust lead levels well below the recommended level of 200 µg/ft².

4.4 Kitchen Range Hood

This facility has a commercial range hood, however there is no power to the unit as it has been de-commissioned.

4.5 Temperature & Relative Humidity (RH)

ASHRAE 55-1992 recommends that temperature ranges should be between 73 to 77 degrees Fahrenheit (°F) during the summer and 68 to 75 °F during the winter. Relative humidity levels should remain between 20 to 60 percent. Temperature and relative humidity readings were slightly elevated although most were within range.

| Sample # | Location / Description | Temp. | Relative Humidity |
|----------|------------------------|-------|----------------------|
| 1 | IFR | 77.0 | 39.1 |
| 2 | IFR Storage | 79.2 | 39.9 |
| 3 | IFR Hallway | 79.0 | 40.0 |
| 4 | IFR Restroom | 80.2 | 38.5 |
| 5 | Supply Room | 76.5 | 38.9 |
| 6 | Lobby | 76.9 | 39.1 |

| Table 4.5.1.A - | Temperature 8 | Relative | Humidity |
|-----------------|------------------|----------|----------|
| Table Tivilin | I GITTPOTECETE E | | |

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| Sample # | Location / Description | Temp. | Relative Humidity |
|----------|------------------------|-------|----------------------|
| 7 | Drill Floor | 75.6 | 39.3 |
| 8 | Admin Office | 69.1 | 32.1 |

4.6 Illumination

Illumination levels that were measured can be found in Attachment 6. The numbers represent the illumination level in foot-candles (FC). In general, measurements are taken at task surface level, such as on desks or the hood of vehicles. Measurements not taken on a desk, workbench, or vehicle are taken at waist level.

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991. In general, IES recommends a range of 20 to 50 foot-candles as the minimum lighting requirements for the performance of visual tasks of high contrast or large size, such as would typically occur in shop areas. In addition, IES recommends a range of 50 to 100 foot-candles as the minimum lighting requirements for the performance of visual tasks of visual tasks of medium contrast or small size, such as would typically occur in an office area. Lighting levels were within range.

| Sample # | Location / Description | FC | Meet Standard |
|----------|------------------------|--------|------------------|
| LUM-1 | IFR Restroom | 66.0 | Yes |
| LUM-2 | Supply Room | 55.6 | Yes |
| LUM-3 | Lobby | 48.0 | Yes |
| LUM-4 | Drill Floor | + 55.5 | Yes |
| LUM-5 | Admin Office WS 1 | 51.1 | Yes |
| LUM-6 | Admin Office WS 2 | 51.5 | Yes |
| LUM-7 | Admin Office WS 3 | 55.3 | Yes |
| LUM-8 | Admin Office WS 4 | 57.0 | Yes |

Table 4.6.1.A - Luminescence in Foot-candles (FC)

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Follow-up IH SAV August 8th, 2012

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

Written programs are current and maintained at the facility.

5.2 Training

Training records are centrally located and maintained at the facility.

6.0 LIMITATIONS AND APPROVALS

6.1 Technical Assistance

Contact of the Southwest Regional Industrial Hygiene Office, (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist, and the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

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Follow-up IH SAV August 8th, 2012

Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| IH Technician: | <u> </u> | <u>9-12-12</u> Date |
|--|---|------------------------|
| | a i a i i tri tri a a auting, Inc. | Bate |
| Quality Assurance: | | <u>9/12/12</u> Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manager: | | |
| ANALYSING THE REPORT OF AN AND AND AND AND AND AND AND AND AND | | Date |

NGB- Industrial Hygiene Southwest

Cole & Associates

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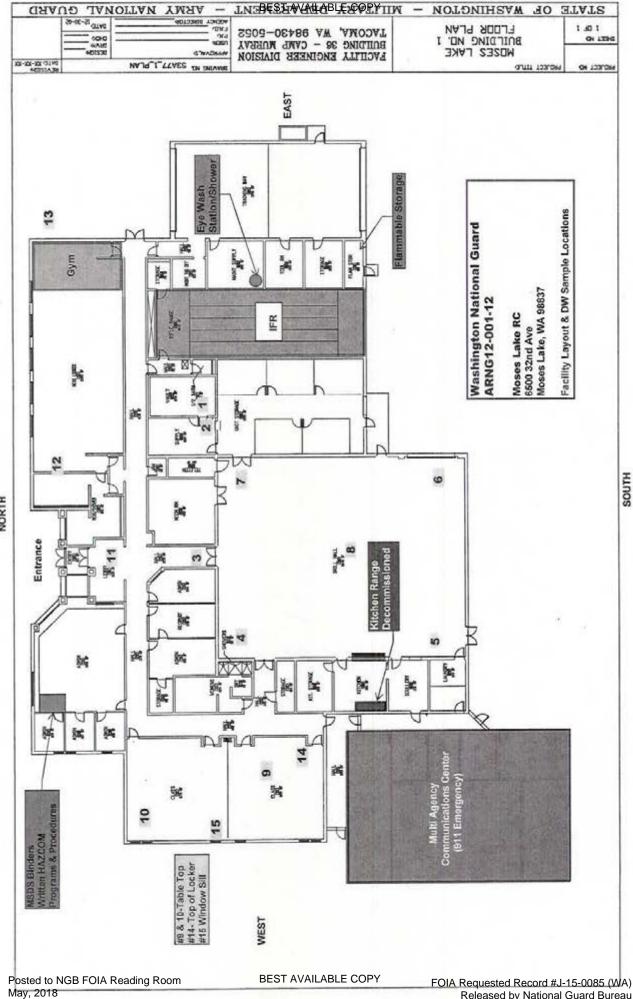
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| CONTROL NUMBER CLOSED | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS SUSPEN (Abatement Plan) DATE | SUSPENSE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|---|--------------------|--------|-----|--|----------|---------------------|----------------------|-------------------|--|
| Moses Lake WA-080912- Exec. Summary | Lead dust | Armory | 4 | Clean all areas within the armory and weapons cleaning areas after every clean-Up SOP in this report. | | | | | Prudent Industrial Hygiene Practices, NGB, OSHA Regulations |

Industrial Hygiene Southwest

Violation Inventory Log

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NORTH

Attachment 3

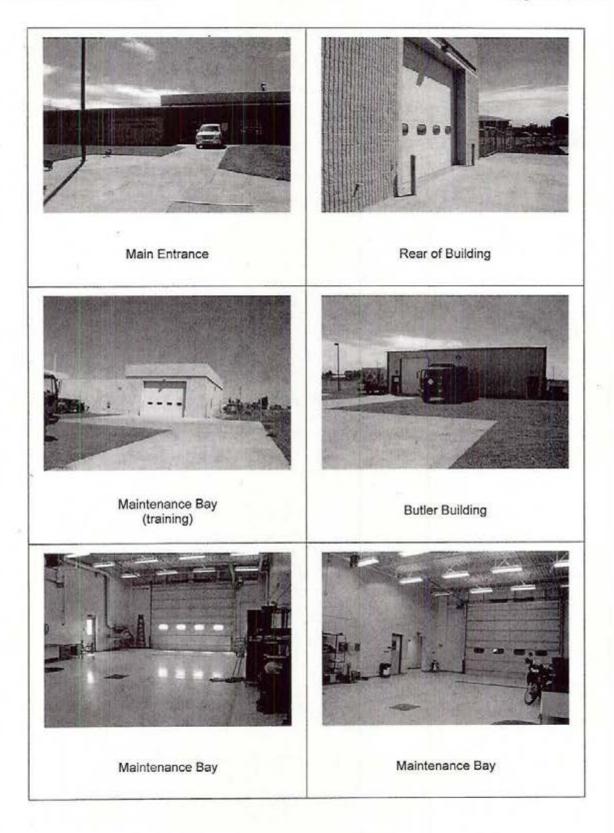
Photographs

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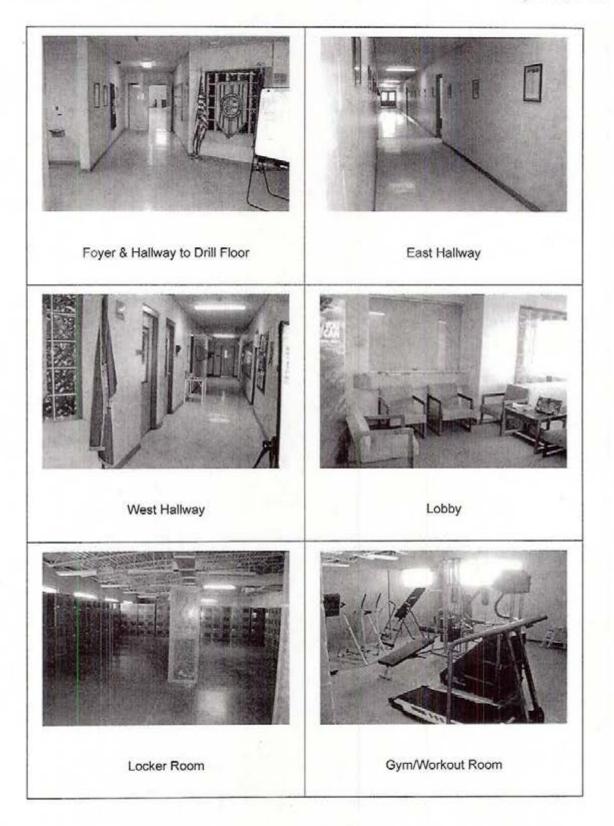
ARNG12-001-12 Moses Lake RC IH Site Assistance Visit

Site Photographs August 8, 2012



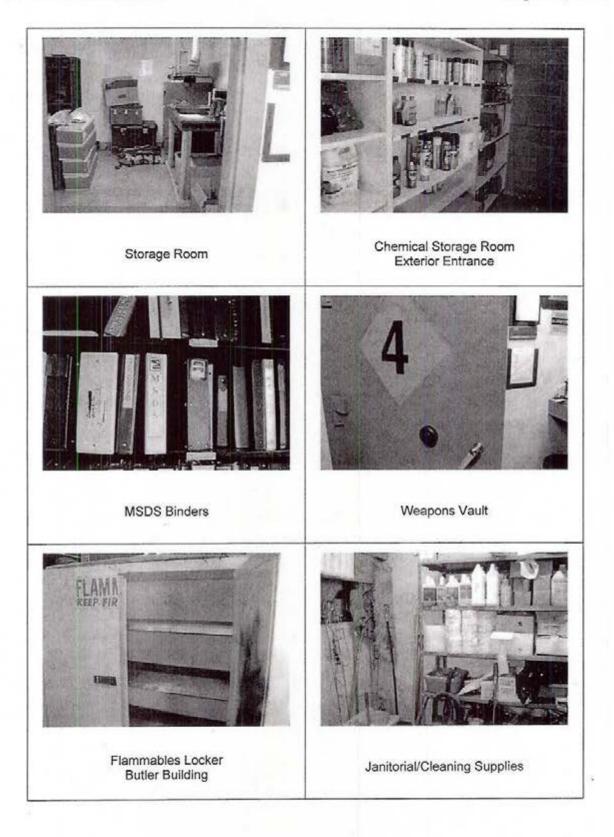
Page 1

ARNG12-001-12 Moses Lake RC IH Site Assistance Visit Site Photographs August 8, 2012



Page 2

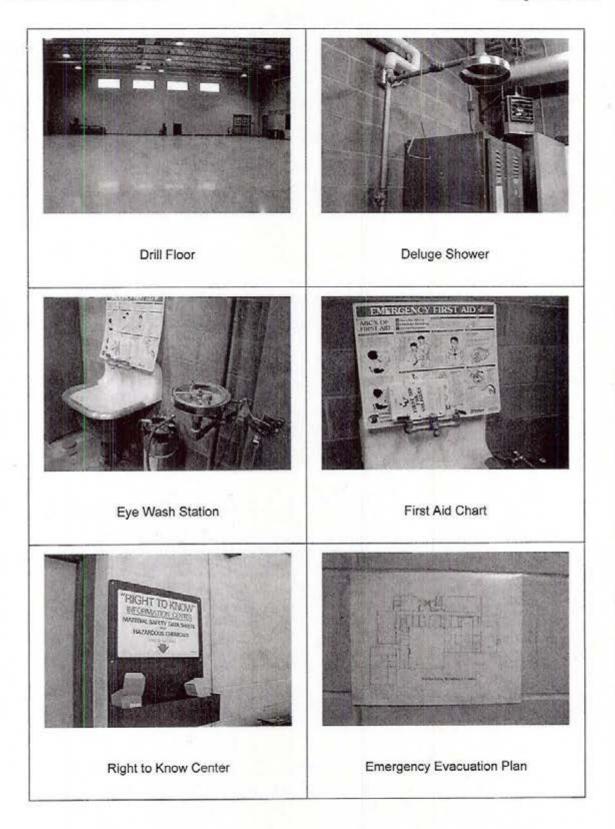
ARNG12-001-12 Moses Lake RC IH Site Assistance Visit Site Photographs August 8, 2012



Page 3

ARNG12-001-12 Moses Lake RC IH Site Assistance Visit

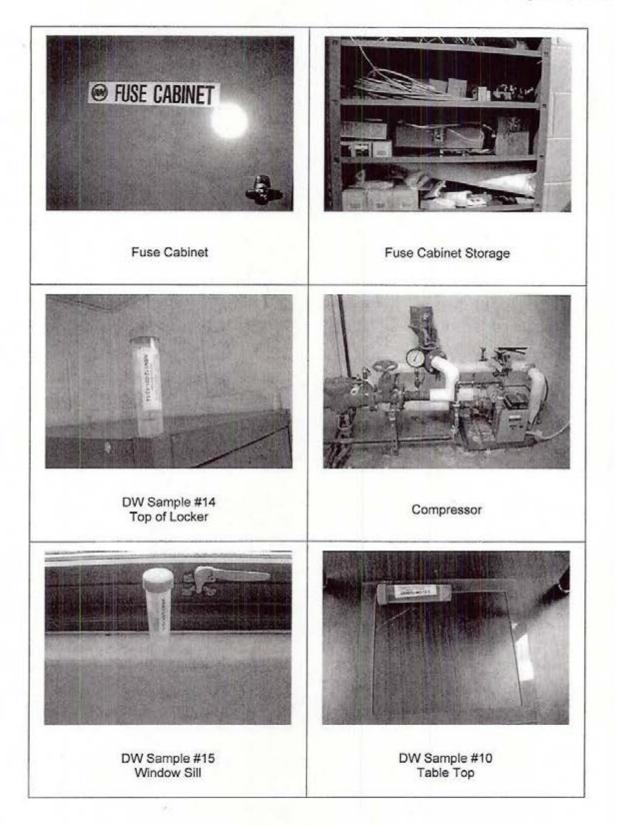
Site Photographs August 8, 2012



Page 4

ARNG12-001-12 Moses Lake RC IH Site Assistance Visit

Site Photographs August 8, 2012



Page 5

Attachment 4

Laboratory Analysis Results

RESERVOIRS ENVIRONMENTAL, INC.

5801 Logan St., Suite 100 Denver CO 80216

TABLE ANALYSIS: LEAD BY WIPE SAMPLING

| RES Job Number: | RES 242199-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-12 |
| Client Project Description: | Moses Lake Readiness Center |
| Date Samples Received: | August 14, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | August 20, 2012 |

| Client | Lab | | Sample | LEAD | Reporting | LEAD |
|------------------|------|--------|------------------|------|--------------------------------|--|
| ID Number | ID N | umber | Area (sq.ft.) | (µg) | Limit (µg/ft ²) | CONCENTRATION (µg/ft ²) |
| ARNG12-001-12-1 | EM | 896869 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-2 | EM | 896870 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-3 | EM | 896871 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-4 | EM | 896872 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-5 | EM | 896873 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-6 | EM | 896874 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-7 | EM | 896875 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-8 | EM | 896876 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-9 | EM | 896877 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-10 | EM | 896878 | 0.50 | 6.5 | 12.5 | 13.0 |
| ARNG12-001-12-11 | EM | 896879 | 0.50 | 6.5 | 12.5 | 13.0 |
| ARNG12-001-12-12 | EM | 896880 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-13 | EM | 896881 | 0.50 | 19.3 | 12.5 | 38.5 |
| ARNG12-001-12-14 | EM | 896882 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-12-15 | EM | 896883 | 0.25 | BRL | 25.0 | BRL |
| ARNG12-001-12-16 | EM | 896884 | 0.00 | | < 6.2 | 5 µg |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

P: 303-964-1986 F: 303-477-4275

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Data QA_

1-865-RESI-ENV www.reilab.com

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Attachment 5

Ventilation

Indoor Air Quality Temperature & Relative Humidity

Page 1 of 1 Moses Lake RC

| Sample | Location / Description | Temp | RH |
|--------|-------------------------|------|------|
| 1 | IFR | 80 | 39.1 |
| 2 | IFR Storage | 79.2 | 39.9 |
| 3 | IFR Hallway to Bathroom | 79 | 40 |
| 4 | Bathroom | 80.2 | 38.5 |
| 5 | Supply Room | 80 | 38.9 |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |
| 10 | | | |
| 11 | | | |
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| 23 | | | |
| 24 | | | |

Temp - Temperature in Degrees Fahrenheit (°F)

RH - Relative Humidity

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Attachment 6

Lighting

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Illumination Study

Luminescence in Foot-candles (FC)

ARNG Moses Lake Readiness Center

| Sample # | Location / Description | FC | Meet Standard |
|----------|------------------------|------|---------------|
| LUM-1 | IFR Restroom | 66 | Yes |
| LUM-2 | Supply Room | 55.6 | Yes |
| LUM-3 | Lobby | 48 | Yes |
| LUM-4 | Drill Floor | 55.5 | Yes |
| LUM-5 | Admin Office WS 1 | 51.1 | Yes |
| LUM-6 | Admin Office WS 2 | 51.5 | Yes |
| LUM-7 | Admin Office WS 3 | 55.3 | Yes |
| LUM-8 | Admin Office WS 4 | 57 | Yes |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |

Attachment 7

Additional Supporting Documentation

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| 1. | Date Prepared: August 8, 2012 Unit Identification Code (UIC) | | | | |
|-----|--|--|--|--|--|
| 2. | Names (and company name) of Personnel Conducting IH SAV | | | | |
| 3. | Facility Name and Brief Summary of Primary Activities Conducted at Facility: <u>Moses Lake Readiness</u> Center; Unit Readiness, Soldier Training, Recruiting | | | | |
| 4. | Facility Address: 6500 32 nd Ave NE, Moses Lake, WA 98837 | | | | |
| 5. | Primary Unit Assigned to Facility: B Company, 1 st Battalion, 161 st Infantry | | | | |
| 6. | Co-Tenant Units Assigned or Working Within Facility (LIST ALL): <u>Recruiting, J-9 Employment Transition;</u> <u>Multi-Agency Communications Center</u> | | | | |
| 7. | Square Feet Area of Facility: DOC: 1994 | | | | |
| 8. | Work Schedule: M-F 0800 - 1700 | | | | |
| 9. | Number of Work Bays: <u>1 (Not in Use)</u> | | | | |
| 10. | Equipment Density and Type: | | | | |
| | a. List Nomenclature Serviced or Maintained at Facility: <u>N/A</u> | | | | |
| | b. List Total Number for Each Nomenclature Services or Maintained at Facility: | | | | |
| 11. | Total Number of Personnel: 120 IDT Drill Weekend: | | | | |
| 12. | No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee):5 | | | | |
| 13. | No. of Maintenance Personnel (Include 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 | | | | |
| 18. | Facility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to: | | | | |
| | 253-512-8921 | | | | |
| 19. | Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: VECO | | | | |
| 20. | Facility Telephone Number: 509-766-2551 Fax: 509-766-6524 | | | | |

ARNG Moses Lake RC Survey (To Be Included In Report)

| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | Yes |
|--|---|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | Yes, weapons are cleaned in the locker rooms, classrooms, and the drill floor after IDT weekends. |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | Yes, see separate report . Converted in February 2012. |
| Is there any peeling paint? Take bulk sample if able. | None noticed |
| Are there any signs of water damage or mold? | Foundation cracks. Areas caulked. No mold noticed |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | DOC of 1994 |
| Quality of housekeeping | Average, units clean their own areas. |
| HVAC maintenance plan in place? | State maintains. |
| Overall condition of HVAC system | State maintains |
| Obtained CO2, Temp, RH monitoring | Temp and RH |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | Yes, all up to date |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | HAZMAT closet/room, MSDS products labeled properly. Ventilation not connected to light switch. |

| 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 | Yes | |
| Annual fire extinguisher inspections tags current | Yes, Tags good until end of 2012 | |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | Battery room in (old FMS) has been used in the past for vehicle training, but not currently used. | |
| 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, all in order | |
| Any Photo labs | N/A | |
| Any hazardous noise sources | N/A | |
| Light levels checked throughout building | N/A All good but IFR work order in. | |
| Breaker panels properly labeled with no exposed wiring | Yes, good | |
| Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | 5 Full time ARNG 20 Civilian 911 occupies part of building Infantry (ground combat) | |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | Parties, receptions, weddings, etc. | |
| Obtain two lead air samples | N/A | |

| Evaluate Kitchen Stove Hood Flow if | Kitchen range hood was decommissioned, no power |
|---|---|
| Present IAW NFPA Standard 96. | |
| Collect Source Noise Measurements of | N/A |
| Kitchen Appliances and Document Using | |
| DD 2214 | |
| Conduct a safety walkthrough of entire | Yes, none noticed |
| facility document any safety deficiencies | |
| found. | |
| - 17 (Sec. 1996) | |
| Take photos of outside of building, all. | Yes |
| sample points and any pertinent hazards | |
| or concerns. | |
| | |
| Name of Armory, POC, phone #, address | - Assistant building manager |
| and organizations in Armory | ARNG and 911 operators (509) 766 - 6559 |
| , | Tunger |
| 4 | |
| | |
| (Add Checklist to Report) | (Add Checklist to Report) |



2004G12

ARMY NATIONAL GUARD

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Industrial Hygiene Site Assistance Visit

Poulsbo Armory 19133 Jensen Way Poulsbo, WA 98370

0

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

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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

30 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Poulsbo Armory, 19133 Jensen Way, Poulsbo, WA 98370

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Poulsbo Armory, 19133 Jensen Way, Poulsbo, WA conducted on 20 August 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 Poulsbo Armory, Poulsbo, WA on 20 Aug 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. None

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. Armory was demolished by Port of Poulsbo and was converted into a parking lot.

ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Poulsbo Armory, 19133 Jensen Way, Poulsbo, WA conducted on 20 August 2012.

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.

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.

 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.

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ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Poulsbo Armory, 19133 Jensen Way, Poulsbo, WA conducted on 20 August 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 <u>Washington</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.

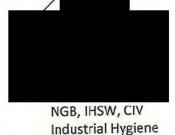
NOTE: The Hazard Assessments can be used for monthly meetings to brief/train, and document large group training events and activities.

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

t (775) 771-3956 or via email at



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

ARNG-CSG-P

27 AUG 2012

MEMORANDUM FOR

The Adjutant General of Washington, One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Poulsbo Armory at 19133 Jensen Way, Poulsbo, WA on 20 Aug 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

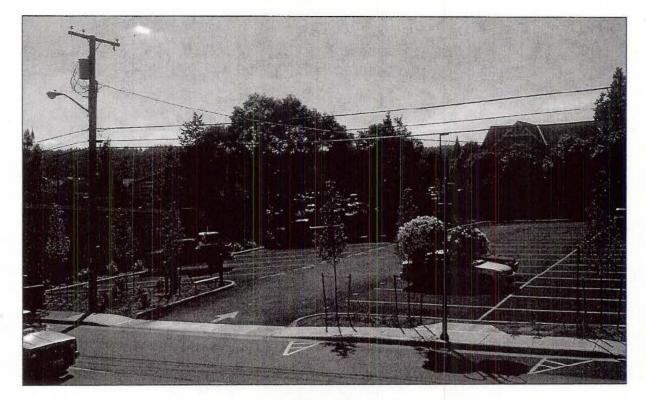
SUBJECT: Executive Summary for the Industrial Hygiene Survey of Poulsbo Armory, Spokane, WA on 20 AUG 2012.

| 4. The technical point of contact information, contact the Occupati OHN | |
|--|---|
| | |
| | |
| and colling langed and in the second se | Chief, Industrial Hygiene |
| CF Chief, Occupational Health | and the second the second s |
| DSS. | Fairview Dr, Carson City, NV 89701 |
| | 2460 Fairview Dr, Carson City, NV 89701 20,000 Army Aviation Dr, Reno, NV 89506 |
| CF w/encl OHN | vioview Dr. Carson City, NV 89701 |
| Facility Supervisor | 20,000 Army Aviation Dr, Reno, NV 89506 |
| | |

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

Industrial Hygiene Services SITE ASSISTANCE VISIT



Army National Guard Poulsbo Armory 19133 Jensen Way Poulsbo, Way 98370

Prepared for:

Program Manager National Guard Bureau Industrial Hygiene Southwest

Prepared by:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, Washington 98032

Project Number: ARNG12-001-13

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 612 of 980 Washington Army National Guard BEST AVAILABLE COPY Poulsbo Armory

Follow-Up IH SAV August 20th, 2012

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| 2.2 | Recurring Observations2 |
| 2 | 2.2.1 Lead Dust Hazards |
| 3.0 | SURVEY PROCEDURES |
| 4.0 | LIMITATIONS AND APPROVALS |
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ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log |
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| Attachment 2 | - | Photographs |
| Attachment 3 | - | Additional Supporting Documentation |

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TOC

Follow-Up IH SAV August 20th, 2012

1.0 EXECUTIVE SUMMARY

On August 20th, 2012, **Consulting** Industrial Hygienist with Cole & Associates Training & Consulting, Inc. attempted to conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Poulsbo Armory located at 19133 Jensen Way, Poulsbo, Washington.

The survey was conducted at the direction of the survey was conducted at the survey was conducted at the survey was conducted at the direction of the survey was conducted at the survey was conducted at

The original purpose of this IH SAV was to re-evaluate the lead-contaminated areas inside the armory and to make any recommendations for additional corrective actions or follow-up work to be completed. During attempts to contact a POC for the facility, it was discovered that the facility had apparently changed hands and was assumed to be sold. Confirmation of this was necessary as there were no records available and it was unknown if the facility had been properly cleaned and/or all hazardous materials removed prior to demolition.

A site visit found the Poulsbo Amory building torn down and a parking lot built where the armory once stood. Interviews with personnel at the Kitsap Sun Newspaper, Poulsbo Historical Society and the Kitsap County Assessor's office disclosed details of the sale.

2.0 BACKGROUND

According to information from the Poulsbo Historical Society the 11,000 square foot armory building was built in the 1940's but it's formal dedication as the National Guard armory did not happen until 1959. The armory was said to have been used for many community events over the years including teen dances back in the 50's, American Legion functions and more recently by the Poulsbo Lions Club.

The armory building and property was sold to the Port of Poulsbo on January 14, 2010 for \$511,000 dollars. Port commissioners purchased the building originally as an investment however final decisions lead to the demolition of the facility and the new construction of a public parking lot.

It turns out that the armory building was in very poor shape and bringing it up to code would cost more than it was worth. There were discussions about renting or leasing the building however again the cost would have been too high. Upgrades to the sprinkler system alone were estimated between 200,000 and 300,000 thousand dollars.

2.1 Follow-up SAV Objectives

The purpose of a typical follow-up SAV would be to re-evaluate potential high lead levels identified from prior SAV results. This would also include interviews with armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety. Due to the circumstances, interviews with Army personnel could not take place.

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Follow-Up IH SAV August 20th, 2012

2.2 Recurring Observations

Information is typically gathered from previous reports as to the need for follow up investigations, however the most recent report available was dated March 31st, 2005.

2.2.1 Lead Dust Hazards

Past reports and analytical results indicated lead dust levels to be well below the recommended level of 200 µg/ft² which is the current analytical criterion.

3.0 SURVEY PROCEDURES

Lead wipe samples are typically collected from dusty horizontal floor surfaces throughout the facility, however, due to the lack of access to the structure, the survey was restricted to visual observation and information from various sources.

4.0 LIMITATIONS AND APPROVALS

4.1 Technical Assistance

Contact **Contact Contact** of the Southwest Regional Industrial Hygiene Office at (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

Contact the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist, the state state of the s

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-2-

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 615 of 980

Washington Army National Guard Poulsbo Armory

Follow-Up IH SAV August 20th, 2012

Signatures 4.2

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector. This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| Industrial Hygienist: | | 8-27-1 |
|-----------------------|---|--------|
| maach an of growing | | Date |
| | Cole & Associates Training & Consulting, Inc. | |
| 70 1 | | |

-27-12

Quality Assurance:

Cole & Associates Training & Consulting, Inc.

IHSW Program Manager:

NGB- Industrial Hygiene Southwest

Date

Cole & Associates

ARNG12-001-13

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| CONTROL NUMBER CLOSED | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS SUSF (Abatement Plan) DA | SUSPENSE DATE | ACTION OICINCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|--|--|--------|------|---|------------------|---------------------|----------------------|-------------------|--|
| Poulsbo WA- 082012-Exec. Summary | Facility did not exist at the time of this SAV | Armory | None | Facility was demolished and made into a parking lot | | | | | Prudent Industrial Hygiene Practices, NGB, OSHA Regulations |



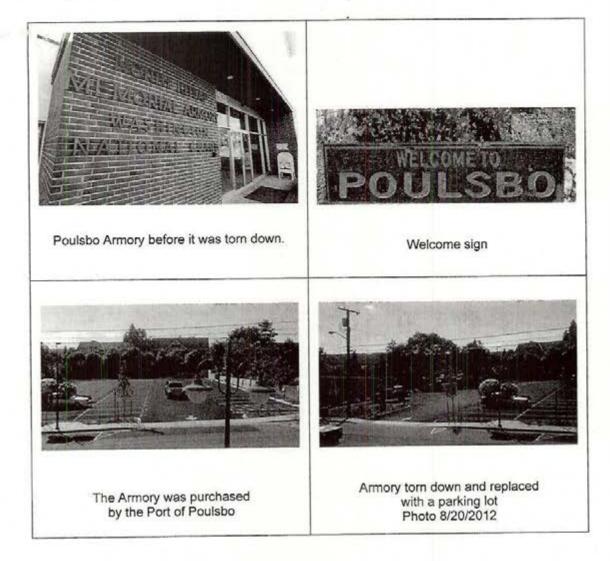
Violation Inventory Log

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ARNG12-001-13 Poulsbo Armory Follow-up IH Site Assistance Visit

Site Photographs August 20th, 2012



Attachment 3, Page 1

Attachment 3

Additional Supporting Documentation

440





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Industrial Hygiene Site Assistance Visit

Puyallup Armory 622 4th Avenue SE Puyallup, WA 98372

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

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ARNG-CSG-IHSW

19 September 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Puyallup Armory, 622 4th Avenue SE, Puyallup, WA 98372

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Puyallup Armory, 622 4th Avenue SE, Puyallup, WA conducted on 28 August 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 Puyallup Armory, 622 4th Ave SE, Puyallup, WA on 28 Aug 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. None

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.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Puyallup Armory, 622 4th Avenue SE, Puyallup, WA conducted on 28 August 2012.

a. Increase the illumination in the drill floor area. Do so by replacing burnt out bulbs, replace existing bulbs with brighter bulbs, add additional lights to room or paint walls a more reflective color. (para. 4.5.1) (RAC 4)

b. Update current chemical inventory and hazardous materials lists. MSDS book should be kept current and updated regularly. (para. 4.1.1) (RAC 4)

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.

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.

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

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Puyallup Armory, 622 4th Avenue SE, Puyallup, WA conducted on 28 August 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 Washington 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 undersigned at (916) 854-1491 or via email at

NGB, IHSW, CIV Industrial Hygiene

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 624 of 980 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

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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.
- 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.

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.

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

ARNG-CSG-P

20 SEP 2012

MEMORANDUM FOF One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

he Adjutant General of Washington,

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Puyallup Armory

at 622 4th Ave SE, Puyallup, WA on 28 Aug 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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.

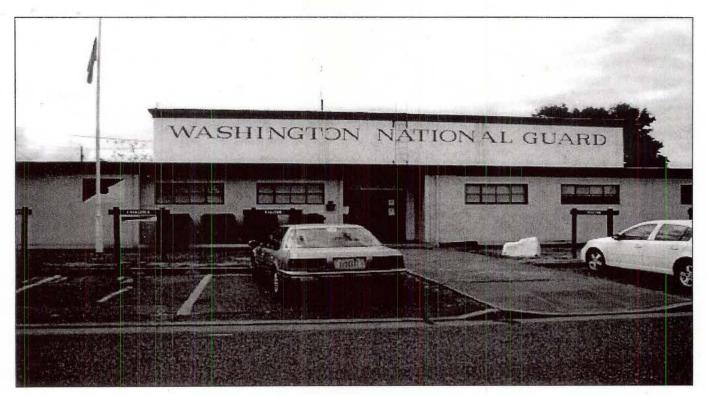
a. No RAC 1, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Puyallup Armory, Puyallup, WA on 28 AUG 2012.

| 4. The technical point of contact is at (775) 771-3956. For follow up information, contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupational Safety & Health Office, 2.10 minutes information, Contact the Occupation of the Occupation of the Occupation, Contact the Occu |
|--|
| |
| Chief, Industrial Hygiene |
| CF Chief, Occupational Health DSS, CFM0) 2460 Fairview Dr, Carson City, NV 89701 ASO, I), 20,000 Army Aviation Dr, Reno, NV 89506 |
| CF w/encl OHN, 2460 Fairview Dr, Carson City, NV 89701 Facility Supervisor, 0,000 Army Aviation Dr, Reno, NV 89506 |

Industrial Hygiene Services SITE ASSISTANCE VISIT



Army National Guard – Puyallup Armory 622 4th Ave SE Puyallup, WA 98372

Prepared for:

rogram Manager National Guard Bureau Industrial Hygiene Southwest

By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-14

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| Washington Army National Guard | |
|--------------------------------|--|
| Puyallup Armory | |

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ARNG12-001-12

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Washington Army National Guard Puyallup Armory Follow-up IH SAV August 28th, 2012

ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log |
|--------------|---|-------------------------------------|
| Attachment 2 | - | Facility Diagram |
| Attachment 3 | - | Photographs |
| Attachment 4 | - | Laboratory Analysis Results |
| Attachment 5 | - | Illumination |
| Attachment 6 | - | Additional Supporting Documentation |
| Attachment 7 | - | Recommendations |
| | | |

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ARNG12-001-12

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Follow-up IH SAV August 28th, 2012

1.0 EXECUTIVE SUMMARY

On August 28th, 2012, **Consulting** of Cole & Associates Training & Consulting, Inc. conducted a follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Puyallup Armory located at 622 4th Ave SE, Puyallup, WA 98372.

The primary point of contact for information gathered during this support was a second at (253) 512-7518. The survey was conducted at the direction of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walk-through survey of the facility including the drill floor, office areas, locker rooms, supply areas, weapons vaults, classrooms, and out buildings. Existing programs, i.e., respiratory protection, hazardous materials program, etc. were also reviewed for compliance.

The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual re-inspection.

A lead dust wipe sampling plan was prepared for the facility to ensure residual lead dust is kept to a minimum. These areas included the drill floor/assembly hall, one weapons vault, the kitchen, lobby, hallway, the long barn, and the training room. All lead levels are at acceptable levels.

One flooring sample was taken from the 9x9 floor tile in the main entrance lobby and tested for asbestos. PLM test results were negative for ACM.

1.1 Recommendation 4.1.1

Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.

1.2 Recommendation 4.5.1

Illumination levels were below recommended minimum standards in offices. Replacing luminaries with a higher watt bulb and adding supplemental task lighting would improve the area.

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Follow-up IH SAV August 28th, 2012

2.0 INTRODUCTION

The Puvallup Armory supports the A Troop 1-303rd Cavalry. The Unit Identification Code (UIC) is This facility is under the command of the c

This facility employs 3 full time guard members on a day to day basis and houses up to 100 IDT members on drill weekends which are once a month. The armory was constructed in 1954 and is 11,800 square feet.

The armory has general offices and administrative areas, to include command and administrative offices, one arms vault, two latrines, a locker room, boiler room, and a small kitchen. There are two out buildings on the property. The Long Barn is used mainly for unit storage and includes a Hazardous Materials Control room and a flammable storage cabinet. Another building is used for training. Reportedly, there has never been an indoor firing range at this facility.

The facility is rented out periodically to civilians for various activities and functions. Currently, the Saint Frances House of Puyallup runs a food bank from the building. A small supply storage area was built on the SW corner of the drill floor for storing miscellaneous cleaning supplies and charitable goods to be distributed.

Weapons are cleaned on the drill floor and stored in the arms room vault on the premises.

Findings in this report were obtained by observations at the facility, previous inspection reports, and through interviews with personnel regarding the armory.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

- Section 2 Introduction
- Section 2.3- Recurring Observations
- Section 3 Survey Procedures
- Section 4 Survey Observations and Findings
- Section 5 Written Programs and Approvals
- Section 6 Limitations and Approvals

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Follow-up IH SAV August 28th, 2012

2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility personnel. There were no major issues regarding recurring observations although the POC indicated that the windows on the drill floor are missing the crank mechanism needed to open and close the windows. Guardsmen currently use a pair of vice grips on a long pole to attempt to open and close them which is said to be very difficult as the windows are approximately 20 feet from the floor. Reportedly this makes it extremely cold in the winter.

2.3.1 Lead Dust Hazards

Previous inspection reports indicate normal lead dust levels.

3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, locker room, kitchen, classrooms, supply storage areas, and the weapons vault area. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust*. The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials \ MSDS

A spot check of the chemical storage areas included the Hazardous Materials Control Room in the Long Barn and the janitorial room off the drill floor. Chemicals were randomly pulled from shelves and cross checked with the MSDS binders which are located on the wall adjacent to the HAZMAT room. All products are listed by name and NSN numbers The inspector found the MSDS information was easily accessed and the MSDS binders accurate.

Most areas were found to be organized and adequately maintained although a current Hazardous Materials Inventory list for the facility could not be located. The most recent one found was dated 2003.

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Follow-up IH SAV August 28th, 2012

4.1.1 Recommendation

Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory.

4.2 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's) *Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing*, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.2.A below and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

| Sample Number | Location Floors | Results (µg/ft ²) |
|------------------|-------------------------------|----------------------------------|
| ARNG12-001-14-1 | Inside vault | BRL |
| ARNG12-001-14-2 | Outside vault | BRL |
| ARNG12-001-14-3 | Drill floor NE | BRL |
| ARNG12-001-14-4 | Drill floor NW | BRL |
| ARNG12-001-14-5 | Drill Floor Center | BRL |
| ARNG12-001-14-6 | Drill floor SE | BRL |
| ARNG12-001-14-7 | Drill floor SW | BRL |
| ARNG12-001-14-8 | Main Entrance Lobby | BRL |
| ARNG12-001-14-9 | Storage Hallway | BRL |
| ARNG12-001-14-10 | Long Barn HAZMAT Control Room | 31.5 |
| ARNG12-001-14-11 | Long Barn by Restroom Door | 17.5 |

| Table 4.2.A - Lead Du | st-Wipe Results |
|-----------------------|-----------------|
|-----------------------|-----------------|

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Washington Army National Guard Puyallup Armory

Follow-up IH SAV

| Armory Augus | | SI 20 , 2012 |
|------------------|--------------------------------|--------------|
| ARNG12-001-14-12 | Training Room | 19.5 |
| ARNG12-001-14-13 | Field Blank | BRL |
| ARNG12-001-14-14 | Kitchen on Top of Refrigerator | BRL |

All areas tested resulted in dust lead levels well below the recommended level of 200 µg/ft².

4.3 Asbestos Floor Tile

Personnel expressed concern over the presence of asbestos floor tile in the facility. There are tan, 9x9 floor tiles in the main entrance lobby which is typically consistent with ACM.

One sample of tile and mastic was taken and sent to the laboratory to be analyzed by PLM. Test results were negative for ACM. Complete analytical results can be found in Attachment 4.

4.4 Kitchen Range Hood

This facility does not have a commercial kitchen.

4.5 Illumination

Illumination levels that were measured can be found in Attachment 5. The numbers represent the illumination level in foot-candles (FC). In general, measurements are taken at task surface level, such as on desks or the hood of vehicles. Measurements not taken on a desk, workbench, or vehicle are taken at waist level.

Illumination measurements were compared with recommendations made by the Industrial Engineering Society (IES)/American National Standards Institute (ANSI) RP7-1991. In general, IES recommends a range of 20 to 50 foot-candles as the minimum lighting requirements for the performance of visual tasks of high contrast or large size, such as would typically occur in shop areas. In addition, IES recommends a range of 50 to 100 foot-candles as the minimum lighting requirements for the performance of visual tasks of visual tasks of negative of 50 to 100 foot-candles as the minimum lighting requirements for the performance of visual tasks of medium contrast or small size, such as would typically occur in an office area.

| Sample # | Location / Description | FC | Meet Standard |
|----------|------------------------|------|------------------|
| LUM-1 | Supply Office WS 1 | 29.0 | No |
| LUM-2 | Supply Office WS 2 | 26.6 | No |
| LUM-3 | Supply Office WS 3 | 29.6 | No |
| LUM-4 | Drill Floor | 29.0 | Yes |

| Table 4.5.A - Luminescence in Foot-Candles |
|--|
|--|

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Washington Army National Guard Puyallup Armory

Follow-up IH SAV August 28th. 2012

| Sample # | Location / Description | FC | Meet Standard |
|----------|------------------------|------|------------------|
| LUM-5 | Admin Office WS 1 | 51.1 | Yes |

4.5.1 Recommendation

Illumination levels were below recommended minimum standards in offices. Replacing luminaries with a higher watt bulb and adding supplemental task lighting would improve the area.

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

Written programs are current and maintained at the facility.

5.2 Training

Training records are centrally located and maintained at the facility.

6.0 LIMITATIONS AND APPROVALS

6.1 Technical Assistance

Contact the southwest Regional Industrial Hygiene Office, (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

Contact the State Safety and Occupational Health Office and/or the State of WA Industrial Hygienist, **State State State**

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Follow-up IH SAV August 28th, 2012

Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| IH Technician: | | <u> </u> |
|-----------------------|---|------------------------|
| 2 | Cole & Associates Training & Consulting, Inc. | Date |
| Quality Assurance: | | <u>9/21/12</u> Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manager: | | |
| | | Date |

NGB- Industrial Hygiene Southwest

Cole & Associates

May, 2018

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|----------------------------|
| May, 2018 |

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(ANSI) RP7-1991

Page 1 of 1

Reference DA FORM 4754 VER: 15 OCT 2009

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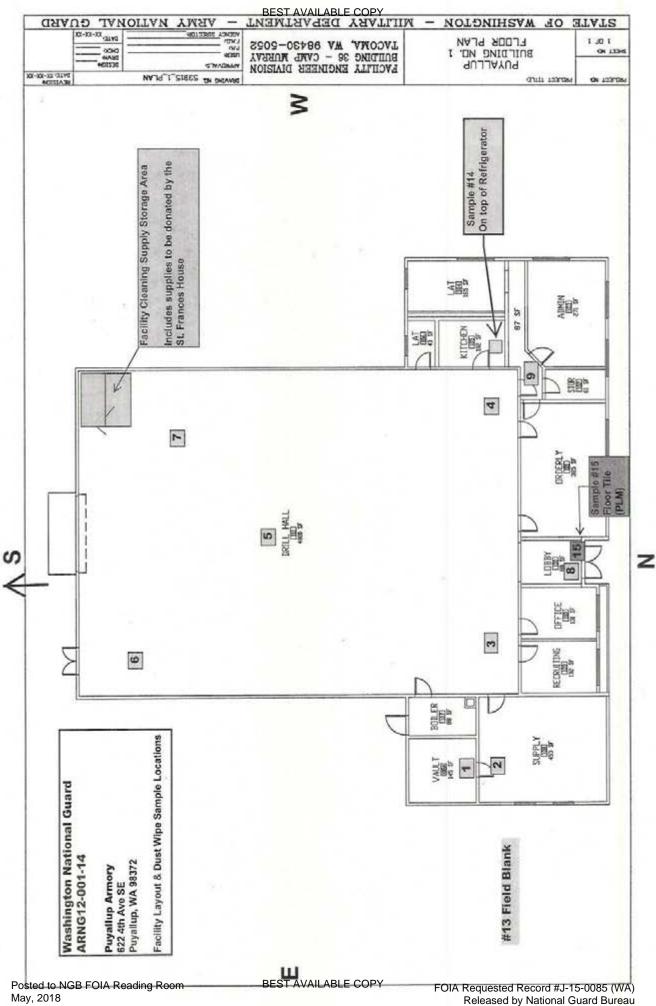
Industrial Hygiene Southwest

Violation Inventory Log

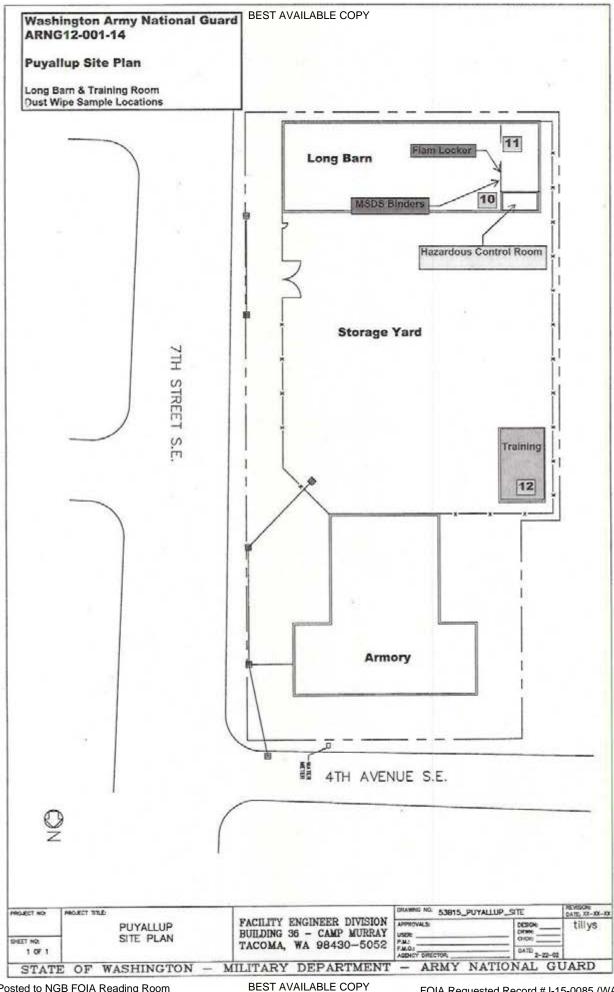
LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS **ARNG Puyallup Armory** REFERENCES

29 CFR 1910.1200 NGR 385-10, Chapter 6 DODI 8050.5

| CONTROL NUMBER HA | WAPUY-082812- A current Hazardous Materials/Chemical in 4.1.1 list could not be locate | WAPUY-082812- 4.5.1 standards in offices. |
|--|--|--|
| HAZARD DESCRIPTION | A current Hazardous Materials/Chemical inventory list could not be located. | Illumination levels were below recommended minimum standards in offices. |
| SITE | Puyallup Armory | Puyallup Armory |
| RAC | 4 | 4 |
| CORRECTIVE ACTIONS (Abatement Plan) | Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory. | Replacing luminaries with a higher watt bulb and adding supplemental task lighting would improve the area. |
| SUSPENSE DATE | | |
| ACTION OIC/NCOIC | | |
| Estimated Cost(s) | | |
| DATE CORRECTED | | 5 -12 |
| | N-ZOO | 3 |



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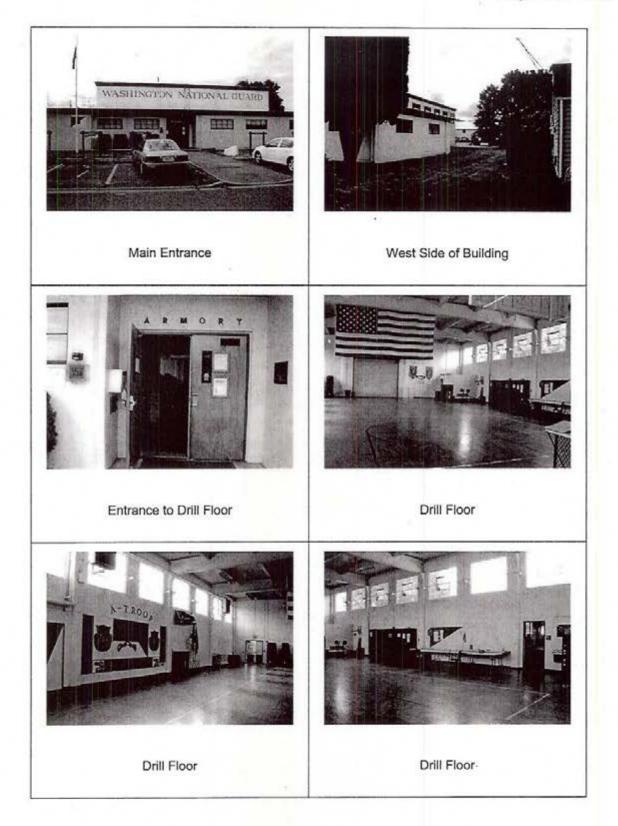


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ARNG12-001-14 Puyallup Armory IH Site Assistance Visit

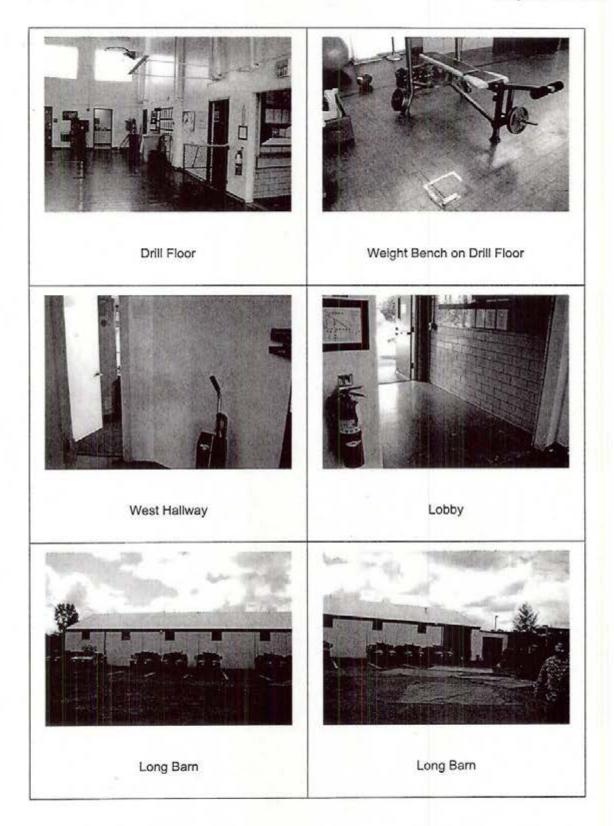
Site Photographs August 28, 2012



Page 1

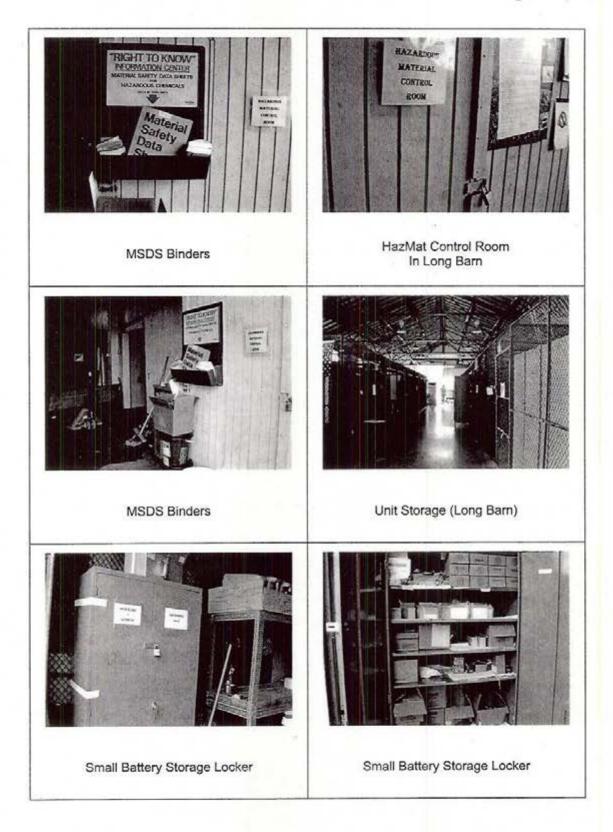
ARNG12-001-14 Puyallup Armory IH Site Assistance Visit

Site Photographs August 28, 2012



Page 2

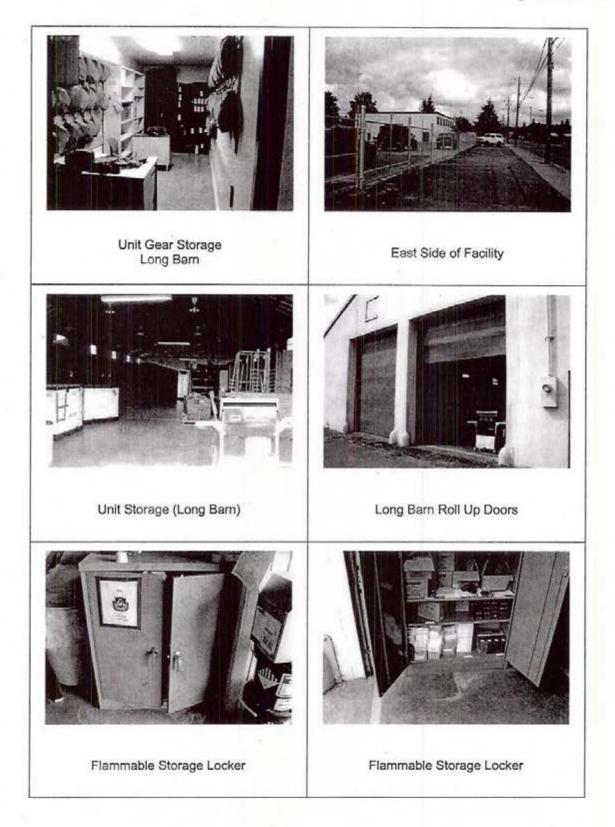
ARNG12-001-14 Puyallup Armory IH Site Assistance Visit Site Photographs August 28, 2012



Page 3

ARNG12-001-14 Puyallup Armory IH Site Assistance Visit

Site Photographs August 28, 2012

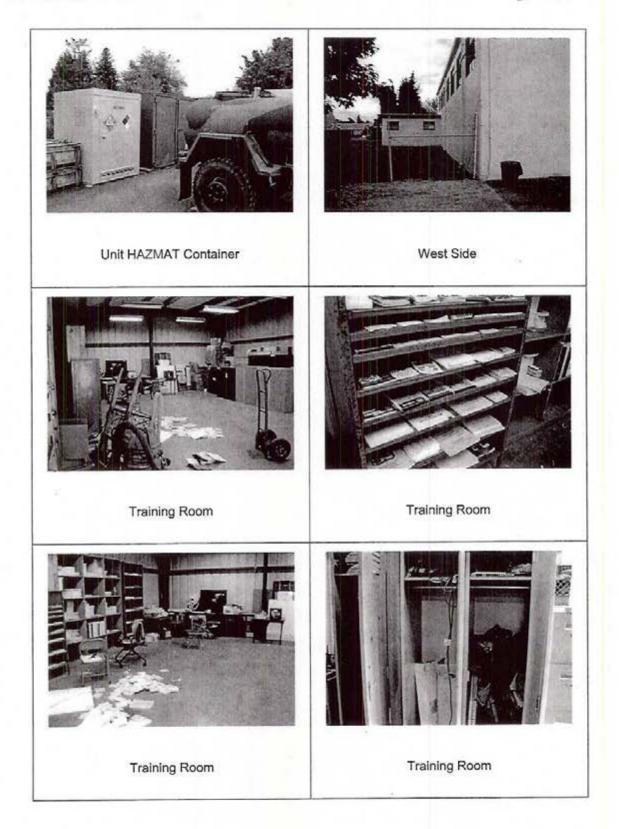


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ARNG12-001-14 Puyallup Armory IH Site Assistance Visit

Site Photographs August 28, 2012

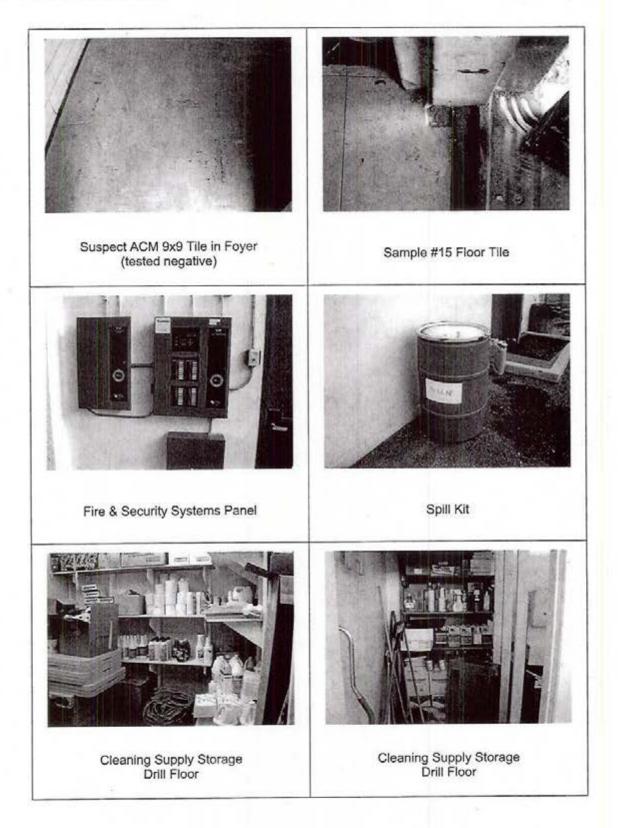


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ARNG12-001-14 Puyallup Armory IH Site Assistance Visit Site Photographs August 28, 2012



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RESERVOIRS ENVIRONMENTAL, INC. 5801 Logan St., Suite 100

Denver CO 80216

TABLE ANALYSIS:

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 243555-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-14 |
| Client Project Description: | Puyallup Armory |
| Date Samples Received: | September 5, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | September 12, 2012 |

| Client | Lab | | Sample | LEAD | Reporting | LEAD |
|------------------|------|--------|------------------|------|--------------------------------|--|
| ID Number | ID N | iumber | Area (sq.ft.) | (µg) | Limit (µg/ft ²) | CONCENTRATION (µg/ft ²) |
| ARNG12-001-14-1 | EM | 899771 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-2 | EM | 899772 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-3 | EM | 899773 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-4 | EM | 899774 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-5 | EM | 899775 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-6 | EM | 899776 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-7 | EM | 899777 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-8 | EM | 899778 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-9 | EM | 899779 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-10 | EM | 899780 | 0.50 | 15.8 | 12.5 | 31.5 |
| ARNG12-001-14-11 | EM | 899781 | 0.50 | 8.8 | 12.5 | 17.5 |
| ARNG12-001-14-12 | EM | 899782 | 0.50 | 9.8 | 12.5 | 19.5 |
| ARNG12-001-14-13 | EM | 899783 | 0.50 | BRL | 12.5 | BRL |
| ARNG12-001-14-14 | EM | 899784 | 0.50 | BRL | 12.5 | BRL |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

P: 303-964-1986 F: 303-477-4275 5801 Logan Street, Suite 100 Denver, CO 80216

Page 2 of 2 BEST AVAILABLE COPY Data QA

1-866-RESI-ENV www.reilab.com

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> Environmential, Inc. « Environmental QA Manual 8

RESERVOIRS ENVIRONMENTAL, INC.

TDH Licensed Laboratory # 30-0136 NVLAP Lab Code 101896-0

| 100 | 0 | ND | 100 | | A Tan tile | EM 165887 | ARNG12-001-14-15-PACM |
|------------------------------|--|------------------|----------------------------|-------------------------|----------------------------|---|---|
| Fibrous Components (%) | Asbestos Fibrous C Visual Components ate (%) (%) | Estim | Sub Part (%) Mineral | Physical Description | A Y H R R R | ID Number | Sample Number |
| -non- | Non | Asbestos Content | A | | | lah | Client |
| uai Estimate s-Actinolite | ND=None Detected TR=Trace, <1% Visual Estimate Trem-Act=Tremote-Actinotite | | | | 012 Sort 2012 | September 5, 2012 PLM, Short Report 3-5 Day Sentember 12, 2012 | Date Samples Received: Analysis Type: Turnaround: |
| | | | | | ry 012 | Puyallup Armory September 5. 201 | Client Project Description: Date Samples Received: |
| | | | | | - | ARNG12-001-14 | Client Project Number / P.O.: |
| | | | | | tes | Cole & Associates | Client: |
| | | | | | | RES 243555-2 | RES Job Number: |

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1-666-RESHENV www.reliab.com Data QA

5801 Logan Street, Suite 100 Deriver, CO 80215

Page 2 of 2

TEM Analysis recommended for organically bound resterial (i.e. floor tile) if PLM results are <1%.

P: 303-964-1986 F: 303-477-4275

Illumination Survey

Puyallup Armory

Luminescence in Foot-candles (FC)

Page 1

| Sample # | Location / Description | FC |
|----------|------------------------|------|
| LUM-01 | Supply Office WS 1 | 29.0 |
| LUM-02 | Supply Office WS 2 | 26.6 |
| LUM-03 | Supply Office WS 3 | 29.6 |
| LUM-04 | Drill Floor | 29.0 |
| LUM-05 | Admin Office WS 1 | 51.1 |

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| Date Prepared: 8/29/2012 Unit Identification Code (UIC |
|--|
| Names (and company name) of Personnel Conducting IH SAV |
| Facility Name and Brief Summary of Primary Activities Conducted at Facility: <u>Puyallup Armory</u> Day to day AGR Admin activities, IDT Prep and Recovery |
| Facility Address: 622 4th Ave. SE, Puyallup, WA 98372 |
| Primary Unit Assigned to Facility: A Troop 1/303 rd Cav |
| Co-Tenant Units Assigned or Working Within Facility (LIST ALL): <u>None</u> |
| Square Feet Area of Facility: 11,800 DOC: 1954 |
| Work Schedule: M-F 0700 – 1630 IDT Weekends |
| Number of Work Bays: N/A |
| Equipment Density and Type: N/A |
| a. List Nomenclature Serviced or Maintained at Facility: <u>None</u> |
| b. List Total Number for Each Nomenclature Services or Maintained at Facility: <u>None</u> |
| Total Number of Personnel: <u>3 FT Various ADSW Drill Weekend:</u> |
| No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 3 |
| No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee):0 |
| Total Number of Personnel Enrolled in the Hearing Conservation Program: 0 |
| Total Number of Personnel Enrolled in the Respiratory Protection Program:0 |
| Total Number of Personnel Enrolled in the Medical Surveillance Program:0 |
| Total Number of Personnel Enrolled in the Vision Program:0 |
| Facility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to: |
| 3) 512-7831 |
| |
| |
| Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: |
| Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: Facility Telephone Number: (253) 512–7516 Facility Telephone Number: (253) 512–7516 |
| |

Puyallup Armory Survey Checklist (To Be Included In Report)

| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | Yes |
|--|--|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | Yes, drill floor |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | No IFR ever |
| Is there any peeling paint ? Take bulk sample if able. | Yes, samples were taken in 2007. Results were negative for lead based paint. |
| Are there any signs of water damage or mold? | None visible |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | Foyer 9x9 tile, a sample on request |
| Quality of housekeeping | Average |
| HVAC maintenance plan in place? | State maintains, drill floor windows need crank mechanism to open and close |
| Overall condition of HVAC system | State maintains, very cold in winter, no A/C fans are used in the summer |
| Obtained CO2, Temp, RH monitoring | N/A |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | MSDS Master chemical list in binder dated 2003 |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | In order with NSN numbers Is ventilated |

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COLE & ASSOCIATES TRAINING & CONSULTING, INC.

ENGINEERING, HEALTH, SAFETY, AND ENVIRONMENTAL

28 August 2012

US Army National Guard Bureau Industrial Hygiene Southwest 10510 Superfortress Ave, Suite C Mather, CA, 95655

Subject: ARNG12-001-14 Puyallup Recommendations

To Whom It May Concern:

Hazardous Materials \ MSDS

1. Update current chemical inventory and hazardous materials lists. MSDS log/book should be updated, at a minimum, annually or when new chemicals are added to the inventory. (4.1.1)

Illumination

1. Illumination levels were below recommended minimum standards in offices. Replacing luminaries with a higher watt bulb and adding supplemental task lighting would improve the area.(4.5.1).

Cole & Associates Training & Consulting, Inc.

Cole & Associates Training & Consulting, Inc. + 18062 72nd Avenue South, Kent, WA 98032 (425) 793-5505 + (425) 793-5552 Fax + 1-877-455-BEAR + <u>www.ctcbear.com</u>

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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

17230 NE 95th Street

Redmond, WA 98520

20 may 2014

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (916) 85

(916) 854-1494

Posted to NGB FOIA Reading Room May, 2018

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

ARNG-CSG-P

28 JUL 2014

MEMORANDUM THRU

OHN, Bldg. 6224, 2n Division Dr, JBLM, WA 98433

FOR Commander, Redmond Armory 17230 NE 95th Street, Redmond, WA 98520

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Redmond Armory 17230 NE 95th Street, Redmond, WA on 20 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 Redmond Armory 17230 NE 95th Street, Redmond, WA on 20 MAY 2014.

b. The findings and recommendations in this Executive Summary are controlling and supersede all recommendations in the Industrial Hygienist report (reference Attachment II). However, IHSW concurs with the observations and findings within the attached Industrial Hygiene 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. Continue quality <u>housekeeping practices</u> in order to help <u>prevent migration</u> of heavy metals throughout the facility, avoid dry sweeping and do clean horizontal surfaces regularly. (Exec. Summary) (RAC 4)

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Redmond Armory 17230 NE 95th Street, Redmond, WA on 20 MAY 2014

b. Conduct a facility survey to identify and assess extent of <u>asbestos hazards</u> and implement an Asbestos Hazard Management Plan. (para. 5.3) (RAC 3)

c. Inspect first aid kits, update inventory, remove and replace expired materials. (para. 4.2) (RAC 3)

d. Develop and maintain a <u>chemical inventory list</u>, <u>Safety Data Sheets (SDS) & a written Hazard</u> <u>Communication</u> program, with an annual or as needed personnel training. (para. 6.2) (RAC 4)

e. Increase lighting in bldg. 500: Redmond Rm & DET 2 Officers room and bldg. 501: Office 114 needs additional lighting. (para. 4.8) (RAC 4)

f. Have the <u>annual and monthly fire extinguisher inspections</u> conducted and extinguisher tags are properly annotated. (para. 7.4.1) (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:

(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).

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Redmond Armory 17230 NE 95th Street, Redmond, WA on 20 MAY 2014

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>Washington</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



NGB, IHSW, CIV Regional Industrial Hygiene Manager

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LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Industrial Hygiene Southwest Violation Inventory Log

Redmond Armory, Redmond, Washington

ANSI Z308.1-2009 Standard and MIL-AR 420-1, 5-24b, ANSI RP7-1991 REFERENCES 29 CFR 1910.157(e) STD-1472 E 1910.1200 (h) 29 CFR c, & d é CORRECTED DATE Estimated Cost(s) OIC/NCOIC ACTION SUSPENSE DATE asbestos hazards; implement an Increase lighting in the locations monthly & service them anually. inventory, remove and replace Asbestos Hazard Management Conduct a re-inspection of the Maintain documention on the Inspect first aid kits, update documentation indicating this listed in Section 4.8 and the personnel receive HAZCOM training has been conducted. Inspect fire extinguishers facility assess extent of CORRECTIVE ACTIONS Ensure all appropriate training and maintain table in Appendix E. expired materials. (Abatement Plan) inspection tag Plan. RAC 4 4 3 4 4 Buildings 500 & 501 Redmond Rm & Det.2 Officers Rm Building 501 Bldg. 501: Office 114 Bidg. 500: Facility Facility SITE inspected monthly and had an annual inspection since 2012. WARA-05212014- Illumination was insufficient for Expired materials in the first Fire extinguishers throughout both facilities were not being Asbestos Building Materials: Communication (HAZCOM) Hazard Management Plan inspection and Asbestos HAZARD DESCRIPTION Program training was not activities performed. Records of Hazard provided. aid kit. WARA-05212014-WARA-05212014-NARA-05212014-WARA-05212014-NUMBER CONTROL 7.4.4 7.4.1 5.3 4.8 6.2 CLOSED

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Page 1 of 1

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.
- 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.
- 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</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.

 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:
 - 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)

REDMOND ARMORY 17230 NE 95th St. Redmond, Washington 98520

May 21, 2014

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.IH1716.18



Reviewed by:



Posted to NGB FOIA Reading Room May, 2018

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| 8.0 | PROJECT LIMITATIONS |
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| 9.0 | PROJECT APPROVAL |

Appendices:

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- B Assessment Criteria
- C Photo Log
- D Chemical Inventory
- E Floor Plan/Illumination Survey/IAQ Temp, RH, CO, & CO₂
- F Ventilation Data
- G Field Notes
- H Calibration Certificates
- I Air Sampling & Metal/Lead Wipe Tables
- J Laboratory Reports
- K Employee List
- L IHSW Violation Inventory Log
- M Hazard Assessments
- N Recommendations
- O DD Forms 2214
- P Installation Status Report
- Q Facility Information
- R Safety Related Information
- S Noise Dosimetry Data
- T Additional Supporting Documentation

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EXECUTIVE SUMMARY

| On May 21, 2014 | Certified Industrial Hygienist (CIH), | and |
|------------------------------------|---|--------|
| ndustrial Hygiene | Technicians, all with Network Environmental Sys | stems, |
| Inc. (NES), conducted an Industria | l Hygiene Site Assistance Visit (IHSAV) at the Ar | mory, |
| located at 17230 NE 95th Street | in Redmond, Washington. The primary point of co | ontact |
| (POC) for information gathered d | uring this survey was who m | ay be |
| reached by phone at (425) 497-30 | 501 or by email at | The |
| secondary POC was | State IH Technician, who may be reach | ed by |
| phone at (253) 912-3181 or via em | ail at | |

The objectives of this IHSAV were to:

- Evaluate work processes conducted within the facility;
- Review hazardous material storage and use procedures;
- Collect area and breathing zone air samples;
- Collect metal surface wipe samples;
- Measure the volumetric flow of exhaust ventilation systems;
- Assess potentially noise hazardous areas;
- Measure illumination levels;
- · Collect indoor air quality data;
- Evaluate existing safety hazards;
- Inspect and evaluate the indoor firing range, active or converted (if present);
- Inspect and evaluate the paint booth operation and systems (if present);
- Evaluate the facility for potential asbestos, lead, and mold hazards;
- Review safety policies/programs, training, and record keeping; and
- Conduct Hazard Assessments (HA's).

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest (IHSW) – 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 methodologies, results, findings, regulatory requirements, and recommendations. Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables:

deserve recognition

for their assistance during the IHSAV. Both were cooperative with questions asked, knowledgeable in site work processes, and provided assistance obtaining information. The details within this report are a direct result of the assistance provided by the Redmond

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 669 of 980 Armory personnel was instrumental in coordinating and providing access to the facility and site personnel.

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2.0 PROCESS DESCRIPTION

The Redmond Armory consisted of two (2) buildings (Building 500 and Building 501). The buildings consisted of the following: offices, supply rooms, kitchens, dining halls, arms vaults, simulator room and classrooms. General administrative duties were conducted in the offices. There was no active or converted indoor firing range (IFR) at the facility. Site personnel reported that the facility is occasionally used by the public. However, public use is limited to those who have a signed lease agreement. The only existing lease agreement was with the Civil Air Patrol.

The Armory is located west of Highway 520 and east of Interstate 405 on the National Guard Installation. The facility is encompassed by a residential neighborhood on all sides.

Staff reported that both buildings were constructed in 1954. The total square footage of Building 500 was reported to be 8,342 square feet (ft²) and Building 501 to be 7,764 ft². There were a total of four (4) full time guard members assigned to Building 501. Building 500 is only used by M-Day soldiers during drill weekends. The Armory operates from 0700 to 1700 Monday through Friday. Multiple units were assigned to the facility. However, the primary unit is the Mechanized Infantry Company (A-161). A copy of the employee list is provided in Appendix K.

NES observed records indicating that an Asbestos Survey was conducted at both buildings in 1992. The results of the survey are discussed in section 6.3 of this report. NES was provided with a copy of the report, included in Appendix T.

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3.0 METHODS

NES assessed multiple conditions and operations using quantitative means. The methods used to conduct these assessments are detailed in this section. Results of these assessments are detailed in Section 4.0.

3.1 Personal Breathing Zone Air Sampling

NES did not conduct personal breathing zone air sampling during this IHSAV as no work processes were conducted where NES could conduct such sampling.

3.2 Indoor Air Quality

Carbon dioxide (CO₂) 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 during respiration. 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. 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).

Temperature is commonly measured during IAQ assessments to determine comfort of occupants. Indoor temperatures are recommended to range 68-74° Fahrenheit (F) during the winter and 72.5-80 °F in the summer. Relative humidity indicates the amount of moisture in the air. Typically, interior humidity levels above 65-70% can be conducive to fungal conditions.

Carbon dioxide, temperature, and relative humidity were measured using a TSI Q-Trak Meter, model 8551. A copy of the current annual calibration certificate for this instrument is located in Appendix H.

3.3 Air Monitoring - Carbon Monoxide

Carbon monoxide is a colorless, odorless, poisonous gas. It is produced by the incomplete burning of solid, liquid, and gaseous fuels. Appliances fueled with natural gas, liquefied petroleum (LP gas), oil, kerosene, coal, or wood may produce CO. Through the use of ventilation, it is uncommon to find elevated concentrations of CO indoors. The health effects of CO depend on the concentration of CO and length of exposure, as well as each

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 672 of 980 individual's health condition. The concentration of CO is measured in ppm. Health effects from exposure to CO levels of approximately 1 to 70 ppm are uncertain, but most people will not experience any symptoms. Air monitoring for carbon monoxide (CO) was performed throughout the facility using a TSI Q-Trak Meter, model 8551. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.4 Metal Wipe Sampling

Lead dust may be introduced into a facility from work processes, facility finishes, consumer products, or other sources. Lead wipe samples were collected from horizontal work and floor surfaces in various locations throughout the facility to evaluate the potential presence of leadcontaminated dust. Ghost Wipe[™] 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.

3.5 Painted Surface Evaluation

Based on the age of most National Guard facilities, it is possible that lead paint could be present on walls and other surfaces. If kept intact, the potential hazard of lead paint is minor. Paint that is peeling or otherwise degraded could potentially result in lead-contaminated dust and increases the risk of exposure. Thus, an identification and assessment of deteriorating paint was conducted as part of this IHSAV.

The majority of painted surfaces throughout the Armory were in good and intact condition. Peeling paint was identified inside Building 501 on the hallway wall near room 122A, which had a lite blue coating on a concrete block wall substrate. A paint chip sample was collected and submitted to ALS, located in Salt Lake City, Utah to be analyzed for lead in accordance with NIOSH Method 7300 modified method.

3.6 Exhaust Ventilation Survey

No exhaust ventilation systems were identified at the Redmond Armory to be evaluated during this IHSAV.

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3.7 Personal Noise Dosimetry and Sound-Level Measurements

Personal noise dosimetry and sound level measurements were not taken during this IHSAV as no hazardous noise sources were identified.

3.8 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.

3.9 Equipment Used

The following equipment was used for this survey:

| Туре | Model Number | Serial Number | Calibration Date |
|---------------------|--------------|---------------|------------------|
| Gray Wolf IAW Meter | IQ-410 | 01-936 | January 2014 |
| Extech Light Meter | 407206 | Q105859 | October 2013 |

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

3.10 Quality Assurance

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

- Using appropriately educated & experienced staff who receive continuing education;
- · Documentation of pertinent field and sampling information;
- Peer review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to documented method requirements, in particular to NIOSH & OSHA methods, & 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;
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

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4.0 SAMPLING RESULTS

4.1 Personal Breathing Zone Air Sampling

NES did not conduct personal breathing zone air sampling during this IHSAV as no work processes were conducted where NES could conduct such sampling.

4.2 Indoor Air Quality

The average outdoor CO_2 concentration was measured to be 486 ppm; therefore, the maximum indoor CO_2 concentration recommended by ASHRAE was 1,186 ppm. The CO_2 concentrations from inside Building 500 ranged from 488 to 554 ppm and from 492 to 761 ppm in Building 501. The ASHRAE recommended concentration was not exceeded in any of the areas measured.

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 Building 501 ranged between 68.4 and 70.5°F. Temperatures inside Building 500 ranged between 66.7 and 67.6°F. Relative humidity in Building 501 ranged from 43.5 to 48.6% and in Building 500 ranged from 46.1 to 49.9%. Each of the rooms in Building 500 were found to be slightly below the ASHRAE recommended temperature. However, the building is only used during M-Day operations and was not heated or occupied on the day of the IHSAV. Both buildings were within acceptable ranges for relative humidity.

A table of the sample locations and corresponding IAQ measurements is available in Appendix E of this report.

4.3 Air Monitoring - Carbon Monoxide

Carbon monoxide concentrations were measured at a total of thirty (30) locations throughout Buildings 500 and 501 using a Gray Wolf Indoor Air Quality Probe. The concentration of CO inside the facilities ranged from 1 to 2 ppm, close to outdoor background concentrations. These concentrations are also below the exposure limit ceiling of 200 ppm set forth by OSHA. A summary of CO measurements collected is provided in Appendix E.

4.4 Metal Wipe Sampling

Wipe samples for lead dust were collected from horizontal surfaces in selected areas of the Redmond Armory facility to determine if housekeeping efforts have been successful. The US Department of Housing and Urban Development (HUD) recommends 40 micrograms per

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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; 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 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 11 lead wipe samples were collected during the IHSAV to be analyzed in accordance with NIOSH Method 7300, modified for Ghost WipesTM. Four (4) samples were collected from Building 500 from the following locations: simulator room floor, classroom desktop, hallway floor, and locker room floor. Seven (7) samples were collected from Building 501 from the following locations: dining room floor, kitchen countertop, entryway floor, office floor, classroom desktop, and vault floors. Photographs were taken of each sampling location and are presented in Appendix C (Photo Log). The analytical results are summarized in Table 1. Laboratory results are attached in Appendix J.

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| Sample Number | Building | Sample Area | Results (µg/ft ²) | ARNG Standard (µg/ft ²) |
|-------------------------|----------|---|----------------------------------|---|
| 052114-RA501-W-01 | | Room 112, Dining Hall, Near Exit, Floor | <1.3 | \leq 40 μ g/ft ² |
| 052114-RA501-W-02 | | Kitchen, Countertop | 1.6 | $\leq 40~\mu g/ft^2$ |
| 052114-RA501-W-03 | | Entryway, Floor | 1.6 | \leq 40 μ g/ft ² |
| 052114-RA501-W-04 | 501 | HQ Platoon, Carpet, Floor | <1.3 | \leq 40 μ g/ft ² |
| 052114-RA501-W-05 | | Room 101, Classroom, Desktop | 1.7 | \leq 40 μ g/ft ² |
| 052114-RA501-W-06 | | Vault in Supply Room, Floor | 12 | \leq 200 µg/ft ² |
| 052114-RA501-W-07 | | Vault, Outside, West Floor | 27 | $\leq 200 \ \mu g/ft^2$ |
| 052114-B500-W-01 | | Redmond Room, Simulator Room, Carpet, Floor | <1.3 | \leq 40 µg/ft ² |
| 052114-B500-W-02 | | Classroom Three, Desktop | <1.3 | \leq 40 µg/ft ² |
| 052114-B500-W-03 | 500 | Hallway, South End of Building, Outside Women's Restroom | <1.3 | $\leq 40 \ \mu g/ft^2$ |
| 052114-B500-W-04 | | Wall Locker Room 10, Carpet, Floor | <1.3 | \leq 40 µg/ft ² |
| 052114-B500-W- Blank | | Blank | <1.3 | \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

The analytical results indicate acceptable concentrations in each of the areas sampled in both buildings and suggest housekeeping efforts are sufficient.

4.5 Painted Surface Evaluation

One paint chip sample was collected at the Redmond Armory facility to be analyzed for lead in accordance with NIOSH 7300. The analytical results are summarized in Table 2. Detailed laboratory results are included in Appendix J.

| Table 2: | Bulk | paint | chip | sam | ple results |
|----------|------|-------|------|-----|-------------|
|----------|------|-------|------|-----|-------------|

| Sample Number | Sample Location/Description | Results (%) of Lead | EPA/HUD Standard ≤ 0.5% |
|----------------------|---|------------------------|-------------------------------|
| 052114-RA501-Bulk-01 | Main Hall, Outside Room 122A, light blue w/ concrete substrate | 0.013 | |

Bold = Denotes sample results exceed the EPA/HUD standard and is considered to be lead-containing paint.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 677 of 980 The analytical results indicate that no detectable concentrations of lead were found to be present in the collected bulk samples. No further action is necessary at this time.

4.6 Exhaust Ventilation Survey

No exhaust ventilation systems were identified at the Redmond Armory to be evaluated during this IHSAV.

4.7 Personal Noise Dosimetry and Sound Level Measurements

Personal noise dosimetry and sound level measurements were not collected during this IHSAV because no hazardous noise sources were identified.

4.8 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.

Lighting measurements were collected in a total of 14 locations in Building 500 and 15 locations in Building 501. Based on the above criteria, lighting was sufficient in all but three (3) locations. Lighting was insufficient in the Redmond Room and DET 2 Officers room of Building 500 and Office 114 of Building 501. See Appendix E for a table of illumination measurements.

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5.0 FACILITY SYSTEMS & HAZARDS

5.1 Facility/Building HVAC System

An evaluation of the heating, ventilation, and air-conditioning (HVAC) systems that serve the two (2) facilities was conducted. This evaluation consisted of determining if a maintenance plan is in place and a visual inspection of the system. Neither Building 500 or 501 had a HVAC system. No air handling units were present. Fresh air is provided to the facilities by opening windows. Heat was provided by radiant wall heaters, which were reportedly maintained by State Maintenance.

5.2 Water Damage and Limited Fungal Growth Evaluation

The interior of both facilities were visually inspected for water damage and subsequent fungal growth resulting from moisture. Indicated that historically Room 122B of Building 501 had water intrusion that had occurred during rainy days, but State Maintenance had repaired the issue, reported to be poorly sealed flashing. No visible mold growth was observed in the area. Small water stains were observed in some ceiling tiles throughout Buildings 500 and 501. At the time of the IHSAV there were no visual signs of fungal growth or active water intrusion.

5.3 Asbestos Evaluation

A cursory evaluation of the facility's interior and exterior was made to identify the presence of building materials suspected to contain asbestos. Building materials suspected to contain asbestos were identified during the IHSAV. Suspect building materials identified in Building 500, which was reportedly constructed in 1954, include: base cove mastic, 2x4 foot ceiling tiles, thermal system insulation (TSI) pipe wrap, drywall and associated joint compound, 9x9 inch floor tile and associated mastic (under carpeting), and possibly carpet mastic. Suspect building materials identified in Building 501, which was also reportedly constructed in 1954, include: 12x12 inch vinyl floor tiles and associated mastic, base cove mastic, TSI pipe wrap, drywall and associated joint compound, 2x4 foot ceiling tiles, and possibly carpet mastic.

NES was provided with a copy of an Asbestos Survey, which detailed an inventory of Asbestos Containing Material (ACM) identified in 1992. It was reported that a majority of the ACM was abated in 1999. However, no records of abatement were available. A copy of the 1992 survey is provided in appendix T.

No bulk samples were collected during this IHSAV due to variability in State regulations regarding certification and sampling requirements. Having asbestos-containing materials

IHSAV Redmond Armory Post&do:NGB%OR\$SReading Room May, 2018 Page 12 of 19

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 679 of 980 (ACM) in a building does not constitute a hazard in of itself. However, if the ACM is or were to become damaged, asbestos fibers could be released and made airborne, which could result in potential exposure to asbestos fibers. Thus, ACM should be managed in a manner to protect them from becoming damaged.

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6.0 TRAINING DOCUMENTS AND HAZARD ASSESSMENTS

6.1 Written Programs & SOPs

The following written programs and procedures were found at the site with dates of the latest revisions in parenthesis:

- Arms Room Maintenance (3/2014)
- Calibrations SOP (3/2014)
- CBRM Maintenance (3/2014)
- Command Supply Discipline Program (2/2014)
- Communications SOP (2/2014)
- Driving SOP (2/2014)
- Emergency Preparedness (11/2013)
- Hazard Communication HAZCOM (11/2013)
- Maintenance SOP (2/2014)
- Publications (3/2014)
- Radiation Safety (3/2014)
- Supply SOP (4/2014)

The facility uses the Washington Building Managers Handbook for a number of the facility's written Health and Safety Programs. There were also written emergency evacuation maps hanging on the walls of both facilities. A site specific respiratory protection program was available during this IHSAV.

Note: NES evaluated the written programs / procedure documents to verify their presence and implementation. NES did not evaluate the contents or quality of any of the documents identified during this visit.

6.2 Training Documentation

The following training documentation was found at the site with dates of the most recent training provided in parenthesis:

- Emergency Preparedness (10/2013)
- Environmental Compliance Officer Training (not dated)
- Radiation Safety (9/2012)

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 681 of 980 Employees indicated that Hazardous Materials Handling training was performed recently, but were unable to provide records of the training. There were no records of HAZCOM training being provided to site personnel.

Note: *NES* evaluated the training documents to verify whether training has been provided. *NES* did not evaluate the contents or quality of any of the training.

6.3 Hazard Assessments

Hazard assessments were not performed during this IHSAV as the primary work activity conducted at the facility was determined to be administrative support in an office setting. No other work processes were identified to be conducted by staff on a regular basis that would be expected to result in an increased potential for exposure to biological, chemical, and/or physical hazards.

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7.0 OBSERVATIONS AND RECOMMENDATIONS

NES assessed multiple conditions and operations using qualitative means and observations. Our methods and findings of qualitative assessments made are detailed in this section.

7.1 Hazardous Materials Inventory, Storage & Material Safety Data Sheets

A review of the facility's chemical inventory and safety data sheet (SDS) file was conducted. Chemical storage areas (i.e., flammable storage cabinets and rooms) were also inspected as part of this IHSAV. A complete inventory of hazardous materials used at the facility was made available along with corresponding SDSs. A copy of the chemical inventory is provided in Appendix D. Hazardous materials were stored inside of flammable storage lockers and kept in small quantities. The storage lockers were in good condition.

7.2 General Supply Areas

General supply areas throughout the facility were well organized and in good visible condition.

7.3 Contract (Non-DoD) Operations

Contract (Non-DoD) operations were performed at this facility, but the only one reported was the State of Washington, who provides facility maintenance.

7.4 Safety Walk-Through

NES conducted a walk-through of the facility to identify existing conditions and whether safety hazards or regulatory deficiencies were present. Some of the conditions observed were documented in photographs, attached in Appendix C (Photo Log).

- Fire extinguishers in both buildings had not been inspected since 11/2012 and were last serviced 3/2012.
- There was a broken ceiling tile in Building 501 that had an Exit sign mounted on it. The sign cold potentially fall if the ceiling tile is not repaired.
- 3. There was a detectable odor originating from the floor drain in the men's restroom of Building 501. Site personnel reported that the odor had persisted for an extended period. NES recommended that site personnel pour approximately 1-gallon of water to seal the P-trap. The odor dissipated shortly thereafter.
- The sticker on the First Aid Kit in Building 501 indicated that the contents expired in 2008 and 2009.

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- The main entrance into Building 501 had a lip of approximately 6 inches. There is no inidication of the drop off when exiting the building.
- A small opening was observed in the wall of Room 103 in Building 501. The opening was around a pipe elbow.

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8.0 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 construct 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.

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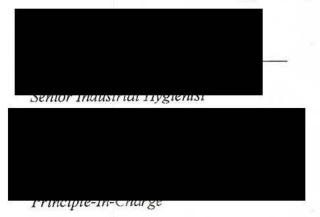
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9.0 PROJECT APPROVAL

This IHSAV was reviewed and approved by:



| July | 17, | 2014 | |
|------|-----|------|--|
| Date | | | |

July 23, 2014 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey; please contact *NES* at 916-353-2360 or **Sector Contact** of the Southwest Regional Industrial Hygiene Office, 916-854-1491. 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.

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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 Redmond Building 500 Redmond, WA May 21, 2014



Photo 1: Armory Redmond, Building 500 facility exterior.



Photo 2: Redmond Armory facility signage.

PHOTO LOG Armory Redmond Building 500 Redmond, WA May 21, 2014



Photo 3: Yard and residential area; view to the north.

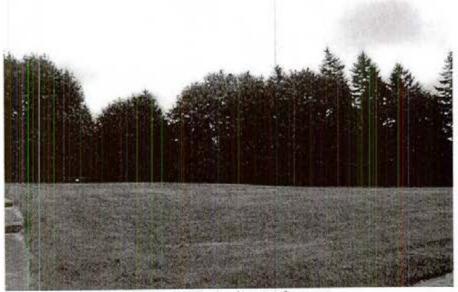


Photo 4: Yard; view to the east.

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PHOTO LOG Armory Redmond Building 500 Redmond, WA May 21, 2014



Photo 5: Yard; view to the south.



Photo 6: Parking lot and other Armory facilities; view to the west.

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PHOTO LOG Armory Redmond Building 500 Redmond, WA May 21, 2014



Photo 7: Fire extinguisher missing monthly inspections and annual servicing dates.



Photo 8: Building 500, Lead wipe sample (052114-B500-W-01) collected from the Redmond (simulator) room; floor.

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PHOTO LOG ARMORY REDMOND BUILDING 500 REDMOND, WA MAY 21, 2014

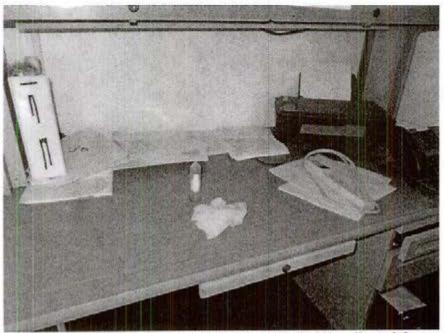


Photo 9: Lead wipe sample (052114-B500-W-02) collected from classroom three; desktop.



Photo 10: Lead wipe sample (052114-B500-W-03), collected from the south end of the hallway; floor.

PHOTO LOG Armory Redmond Building 500 Redmond, WA May 21, 2014

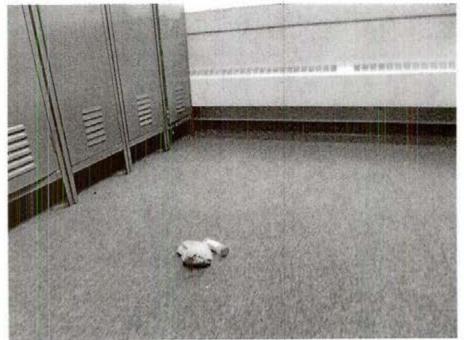


Photo 11: Lead wipe sample (052114-B500-W-04) collected from Wall locker room 10; floor.



Photo 12: Water staining on ceiling tiles.

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PHOTO LOG Armory Redmond Building 500 Redmond, WA May 21, 2014



Photo 13: Opening in carpet, showing 9"x9" vinyl floor tile.

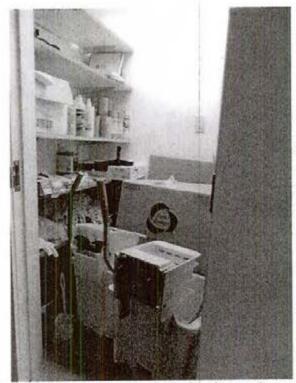


Photo 14: Janitorial storage in locker in men's restroom.

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PHOTO LOG Armory Redmond Building 500 Redmond, WA May 21, 2014

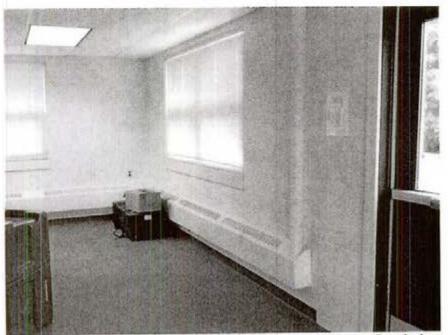


Photo 15: Wall heat registers, fiberglass Thermal System Insulation; carpet floor.

PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 1: Armory Redmond, Building 501 facility exterior.



Photo 2: Fire extinguisher past due for monthly inspection and annual servicing.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 3: Floor drain in Men's Restroom releasing gas odor.

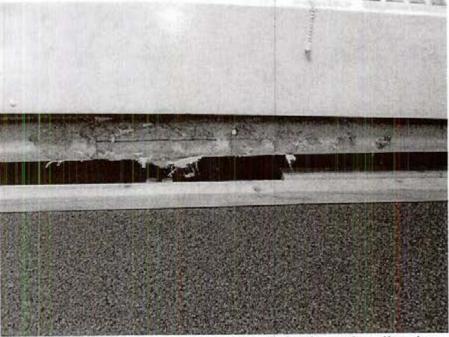


Photo 4: Damaged Thermal System Insulation beneath wall register of West Wall of Room 107.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 5: Exit sign in main hallway, operational but anchored to broken ceiling tile.



Photo 6: First aid kit with expired supplies.

PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 7: Lead wipe sample (052114-RA501-W-01) Dinning Hall; floor.



Photo 8: Lead wipe sample (052114-RA501-W-02) Kitchen; countertop.

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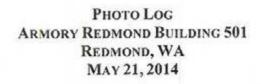




Photo 9: Lead wipe sample (052114-RA501-W-03) Entryway; floor.

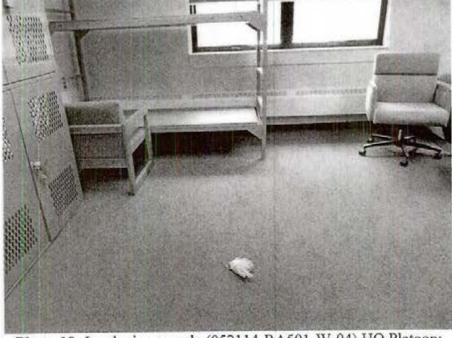


Photo 10: Lead wipe sample (052114-RA501-W-04) HQ Platoon; floor.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 11: Lead wipe sample (052114-RA501-W-05) Classroom 101; desktop.



Photo 12: Lead wipe sample (052114-RA501-W-06) Supply room vault; floor.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014

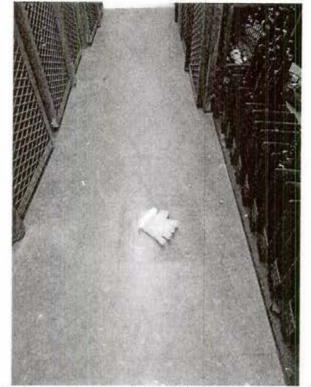


Photo 13: Lead wipe sample (052114-RA501-W-07) Exterior weapons vault; floor.



Photo 14: Bulk paint chip sample (RA-501-Bulk-01) collected in the main hallway; outside Room 122A.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014

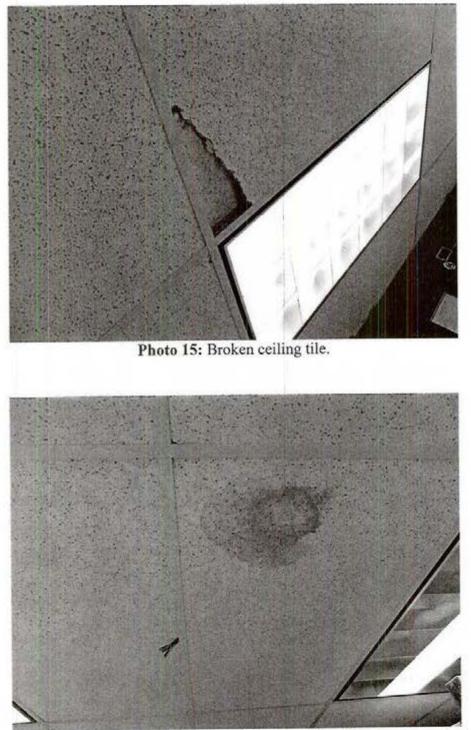


Photo 16: Water staining on ceiling tile.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014

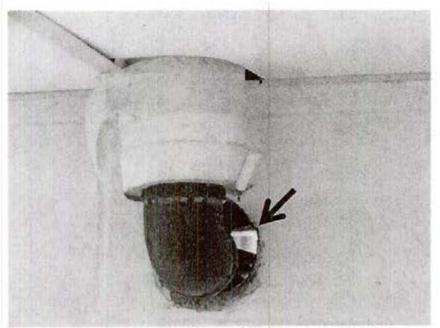


Photo 17: Opening in wall of Room 103; goes to mechanical space.



Photo 18: Supply room vault door.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 19: Mastic residue in supply vault.



Photo 20: Thermal gloves in Supply room.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 21: Mechanical room on south side of Building 501.

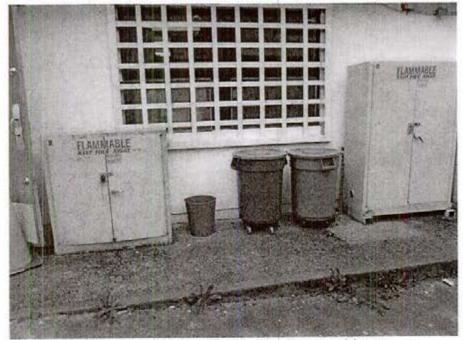


Photo 22: Outdoor flammable storage cabinets.

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PHOTO LOG Armory Redmond Building 501 Redmond, WA May 21, 2014



Photo 23: Exterior weapons vault.

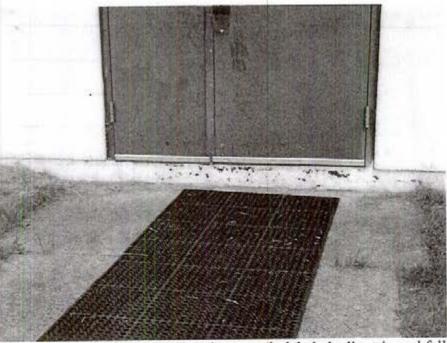


Photo 24: Entrance to Building, improperly labeled; slip, trip and fall hazard.

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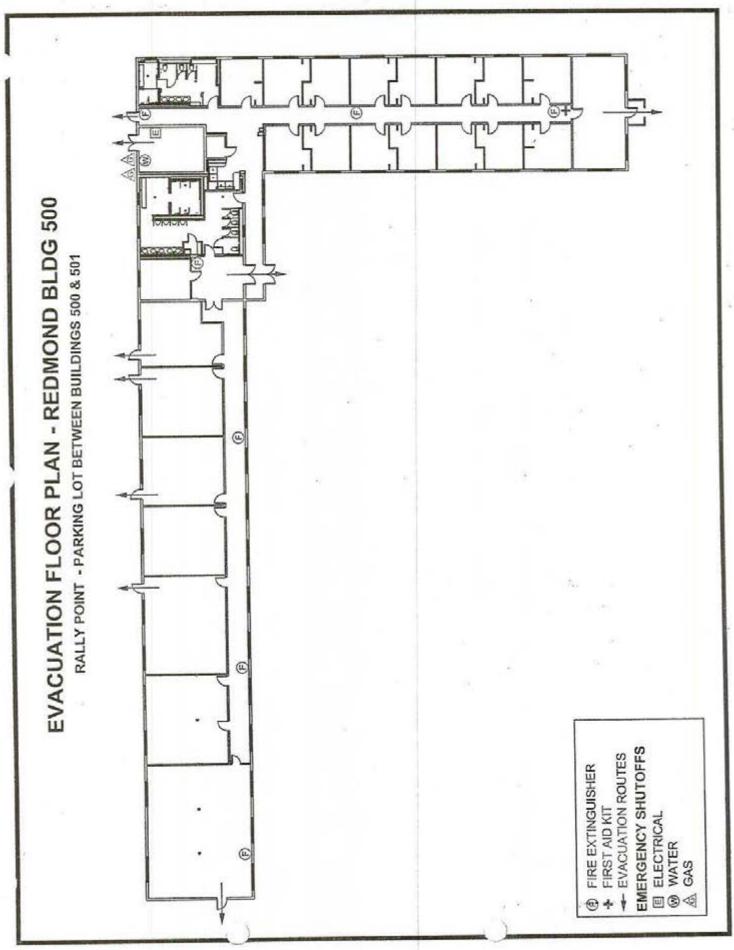
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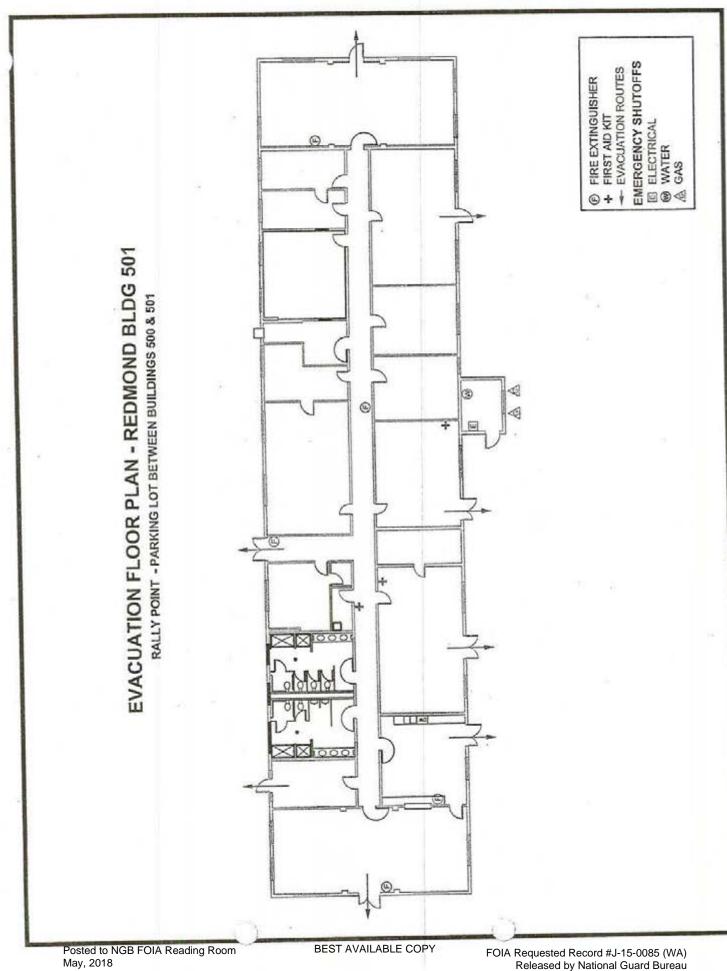
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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 713 of 980

IAQ MEASUREMENTS REDMOND ARMORY REDMOND, WA MAY 21, 2014

BUILDING 500

| Location | CO ₂ max permissible level 1,205 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO Max permissible 200 ppm STEL |
|-------------------------------------|---|---|------------------------------------|---------------------------------------|
| Redmond Room | 488 | 67.3 | 46.1 | 1.6 |
| Classroom 1 | 506 | 67.5 | 46.3 | 1.5 |
| Classroom 3 | 522 | 67.1 | 46.5 | 1.5 |
| 2 nd PLT Office | 503 | 67.5 | 46.6 | 1.6 |
| Men's Restroom | 554 | 66.7 | 48.3 | 1.5 |
| Entry | 515 | 67.4 | 48.9 | 1.5 |
| Hallway Outside Women's Room | 511 | 67.5 | 48.6 | 1.5 |
| Day Room | 507 | 67.3 | 49.4 | 1.5 |
| Mortar Platoon Equipment Room 15 | 514 | 67.0 | 49.7 | 1.5 |
| First Section Room 11 | 494 | 67.6 | 49.9 | 1.5 |
| DET Officers Room 7 | 521 | 66.7 | 49.4 | 1.5 |
| Wall Lockers Room 4 | 498 | 67.5 | 49.2 | 1.4 |
| Sleeping Area Room 3 | 528 | 67.1 | 49.1 | 1.5 |
| Wall Lockers Room 10 | 503 | 67.3 | 49.5 | 1.4 |

BOLD = Outside of permissible range

CO₂ = Carbon Dioxide CO = Carbon Monoxide

 $^{\circ}F = Fahrenheit$

RH = Relative Humidity

IAQ MEASUREMENTS REDMOND ARMORY REDMOND, WA MAY 21, 2014

BUILDING 501

| Location | CO ₂ max permissible level 1,205 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO Max permissible 200 ppm STEL |
|-----------------------------|---|---|------------------------------------|---------------------------------------|
| Orderly Room, 122A | 755 | 68.5 | 48.6 | 1.8 |
| Simulator Room, 120 | 492 | 68.7 | 47.0 | 1.6 |
| Women's Restroom, 119 | 549 | 69.0 | 47.0 | 1.7 |
| Office, 114 | 612 | 68.9 | 46.0 | 1.7 |
| Dining Hall, Room 112 | 608 | 69.0 | 45.7 | 1.7 |
| Kitchen, 111 | 604 | 69.0 | 45.4 | 1.6 |
| Supply Room, 110 | 651 | 69.6 | 45.7 | 1.8 |
| CBRN Room, 107 | 543 | 70.1 | 44.3 | 1.8 |
| Readiness NCO, 122B | 781 | 70.1 | 45.6 | 1.9 |
| AGR Locker Room, 103 | 624 | 70.2 | 44.6 | 2.0 |
| HQ Platoon, 106 | . 605 | 69.9 | 44.1 | 1.9 |
| Readiness NCO DET 2, 104 | 720 | 70.5 | 45.0 | 1.9 |
| Classroom, 101 | 761 | 68.9 | 45.0 | 1.9 |
| Executive Office, 125 | 722 | 68.4 | 45.1 | 1.9 |
| Commander's Office, 124 | 545 | 70.3 | 43.5 | 1.8 |
| Outdoor Control | 486 | 63.2 | 47.6 | 2.8 |

BOLD = Outside of permissible range

CO2 = Carbon Dioxide

CO = Carbon Monoxide

°F = Fahrenheit

RH = Relative Humidity

ILLUMINATION SURVEY REDMOND ARMORY REDMOND, WA May 21, 2014

BUILDING 500

| Room | Location | Light Measurement (FC) | Minimum Lighting Requirement (FC) |
|----------------------------------|-----------------------|---------------------------|--------------------------------------|
| Redmond Room | Tabletop | 37.2 | ≥ 50 |
| Classroom 1 | Center of Room | 65.8 | ≥ 50 |
| Classroom 3 | Desktop | 79.4 | ≥ 50 |
| 2 nd PLT Office | Desktop | 59.2 | ≥ 50 |
| Men's Restroom | Center of Room | 50.8 | ≥ 30 |
| Entry | Center of Room | 99.5 | ≥ 10 |
| Hallway Outside Women's Room | Center of Room | 79.7 | ≥ 10 |
| Day Room | Tabletop | 94.2 | ≥ 50 |
| Mortar Platoon Equipment Room | Desktop | 61.2 | ≥ 50 |
| First Section Room 11 | Desktop | 67.9 | ≥ 50 |
| DET 2 Officers Room 7 | Desktop | 35.0 | ≥ 50 |
| Wall Lockers Room 4 | ockers Room 4 Desktop | | ≥ 50 |
| Sleeping Area Room 3 | Center of Room | 83.0 | ≥30 |
| Wall Lockers Room 110 | Desktop | 63.6 | ≥ 50 |

*FC = foot candle measurement

Bold = Insufficient Lighting

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 716 of 980

IAQ MEASUREMENTS REDMOND ARMORY REDMOND, WA MAY 21, 2014

BUILDING 501

| Room | Location | Light Measurement (FC) | Minimum Lighting Requirement (FC) |
|-----------------------------|----------------|---------------------------|--------------------------------------|
| Orderly Room, 122A | Desktop | 55.8 | ≥ 50 |
| Simulator Room, 120 | Center of Room | 72.8 | ≥ 30 |
| Women's Restroom, 119 | Center of Room | 100.4 | ≥ 30 |
| Office, 114 | Desktop | 48.1 | ≥ 50 |
| Dining Hall, Room 112 | Tabletop | 64.6 | ≥ 50 |
| Kitchen, 111 | Center of Room | 34.8 | ≥ 30 |
| Supply Room, 110 | Center of Room | 37.9 | ≥ 30 |
| CBRN Room, 107 | Desktop | 55.7 | ≥ 50 |
| Readiness NCO, 122B | Desktop | 60.1 | ≥ 50 |
| AGR Locker Room, 103 | Center of Room | 62.4 | ≥ 30 |
| HQ Platoon, 106 | Desktop | 88.1 | ≥ 50 |
| Readiness NCO DET 2, 104 | Desktop | 84.2 | ≥ 50 |
| Classroom, 101 | Desktop | 67.7 | ≥ 50 |
| Executive Office, 125 | Desktop | 80.4 | ≥ 50 |
| Commander's Office, 124 | Desktop | 76.7 | ≥ 50 |

*FC = foot candle measurement

Bold = Insufficient Lighting

| | | 7 | BEST AVAILA | BLE COPY | STOR | 6 |
|--|------------------|--|---|-----------------|--|-----------------|
| NES | | Facilit | y Informati | 4, 2013 | A STATE OF THE STA | |
| General Facil <u>ity Information</u> | 0 | | Date(s) of F | Previous IHSA | Vs: 1992 - Astestas Sarvey | |
| | | | [|)ate(s) of IHSA | W: 5/21/14 | _ |
| IH(s): | n | Y 1 | | 20 5 | | |
| | | | , Blug 50 | | 4 0000 | |
| The stand of the second s | 30' NE | qsth: | st. redu | sond, w. | 4 98520 | <u></u> |
| Facility Commander: | | | | | | |
| | | | | | | |
| Safety Officer: | | 0 | | Phone Number | | |
| No Person(s): H 🐝 | Admin: | Mair | nt [.] Work | Sched: 0-4 | C-1700 Size of Facility: See Activity | ft ² |
| (Include status –AGR, Fed, | | and the local diversity of the local diversit | act Employee) | | | |
| | | | Co-Tenant(s): | 8-735 | HHC 1-161 Build Date: 145-1 | |
| | clude UIC if av | ailable | | List | HHC 1-IG1 Build Date: 19.5-1 All Renovation: Renovation: | El Asb |
| 5.00 54 | 15. | - | | | 1444, No esters | |
| Primary work | 1-la-br | <u>1 Co.</u> | | | | |
| activities at Facility: | | | | | | |
| Pac- | | | | | | |
| Vritten Health & Safety F | Programs / | SOPs | | | and the second second | |
| | Program | Have | Date of Last | # | Comments | |
| Program | Needed | Program | Training | Enrolled | Comments | 1 |
| Confined Space | .Vo | | | | | 4 |
| Emergency Preparedness | Yes | Yes | 17 Oct 20 | 513 | | _ |
| Hazard Communication | Yes | Yes | Unhrown | | Verbally reperfect to have been completed | |
| Hearing Conservation | Vo | | | | / | 4 |
| PPE | No | | | | | _ |
| Respiratory Protection | NO | | | | | |
| Others (Bloodborne Pathogens, I | Lock Out / Tag O | ut, Lifting Device | es, Radiation, SOPs, et | .) – List on ba | ck | |
| Y = Yes N = No N | | | | | | M-F |
| Documents / Records to | | | | | 8216- 501 500 | M- Buy |
| Facility floor plan / | | an | X | Hazardous N | Naterials inventory | 1 |
| List of equipment s | | | X | Personnel lis | st | |
| Previous IH reports | | | | Others (List) | : | |
| NA = Not Applicable to | | | | - | | |
| Non - DoD Contractors | | | | | | |
| Service | Provider | | Se | rvice | Provider | |
| Oil / Water Separator | | the local | ha La | undry | | - |
| Tools | | | and the second se | st Control | | - |
| Rags | | | | zardous Waste | | |
| Refuse | | | Cr | ane Maintenan | ce | - |
| Others: | | | desentation and the second | | | - |



General Salety Compliance Assessment Form

512/19 Revised: September 18, 2013

Facility: Relate store son

Date:_



| Bloodborne Pathogens (1910.1030) | Applicable | × Not Applicable |
|--|--|------------------------------------|
| Waste containers | Yes | ⊥ No |
| PPE available | Yes | No |
| | Applicable | V Not Applicable |
| Compressed Gases (1910.101105) | Yes | No |
| Labeled (contents / empty) | | - NO |
| Good condition | Yes | |
| Proper storage (O ₂ vs. flam, chained, upright, elc.) | Yes | No |
| Flammable cylinders grounded | Yes | ⊥ No |
| Confined Space (1910.146) | Applicable | X Not Applicable |
| Labeled w/ "Danger" sign(s) | Yes | No |
| Calibrated direct reading instruments | Yes | 1 No |
| Entry materials / supplies | Yes | T No |
| Entry materials / supplies | <u> 1997</u> | |
| Electrical Safety (1910.301335) | × Applicable | Not Applicable |
| GFCI plugs | X Yes | No |
| Loose / hazardous wires | Yes | X No |
| Electrical panels unobstructed & labeled | X Yes | No |
| High voltage (>600V); signage / work | Yes | No |
| | Applicable | Not Applicable |
| Emergency Eyewash / Shower (1910.151) | and the second se | |
| Inspection records | - Yes | + No |
| Unobstructed | Yes | NO NO |
| Properly protected (caps over eyewash, etc.) | Yes | No No |
| Emergency Preparedness (1910.3438) | X Applicable | Not Applicable |
| | X Yes | No |
| Alarm system Exits marked / free of obstruction | X Yes | No |
| Exits marked / nee of dostroaddin | and the second | |
| Ergonomics (Gen. Duty Clause) | 3 Applicable | Not Applicable |
| Workplace evaluation conducted | Yes | × No |
| Hazard control / precautions in place | Yes | X NO |
| | Applicable | Not Applicable |
| Fall Protection (1910.2328 & 1926.501503) | Yes | No |
| Elevations of 4ft have railings / toeboard | - Yes | + No |
| Fall protection is in good condition | and the second sec | - No |
| Training received / documented | Yes | 1 N0 |
| Fire Safety (1910.39 & 1910.157) | < Applicable | Not Applicable |
| Fire extinguishers present | < Yes | No |
| Fire extinguishers properly inspected | Yes | × No |
| | A Yes | - No |
| Sprinklers unobstructed | Yes | No Sau Son Proveno |
| Training received / documented | | |
| Forklift, Jacks & Industrial Trucks (1910.178) | Applicable | V Not Applicable |
| Labeled with inspection / service date | Yes | No No |
| Training received / documented | Yes | No |
| Overhead protection | Yes | No |
| | Applicable | X Not Applicable |
| Hand & Powered Tools (1910.241244) | | 1 No |
| Proper guarding & controls | - Yes | |
| 3-prong power cord | - Yes | + No |
| Inspections | Yes | ⊥ No |
| Hazard Communication (1910.1200) | < Applicable | Not Applicable |
| | x Yes | No |
| Chemical inventory | X Yes | No |
| the standard and the baselined | | |
| Materials labeled MSDS available | × Yes | No |

Page 1 of 2



General Sarety Compliance Assessment Form Facility:



Date:_

Revised: September 18, 2013

| Hazardous Materials (1910.105107) | | Applicable | ×. | Not Applicabl | e |
|--|------------|------------|----|---------------|--|
| Storage (quantity, upright, sealed) | _ | Yes | 1 | No | |
| Storage cabinet (flammable & corrosive) | _ | Yes | + | No | |
| Safety equip. present (eyewash / shower/spill kit) | | Yes | 4 | No | |
| Hazard signs at entrance (NFPA, etc.) | _ | Yes | 1 | No | |
| Proper segregation | - | Yes | + | No | |
| Hearing Conservation / Noise (1910.95) | | Applicable | × | Not Applicabl | le |
| Audiometric testing | | Yes | 1 | No | |
| Noise haz, areas (>85dBA) present / labeled | | Yes | 1 | No | |
| Exposure monitoring | | Yes | 1 | No | |
| Heat Stress (General Duty Clause) | 1 | Applicable | × | Not Applicab | le |
| Worksite evaluation | | Yes | 1 | No | 20) Service and the relation of the service of the |
| Precaution / control measures | \square | Yes | T | No | |
| adders (1910 25 | _ | Applicable | 1 | Not Applicab | le l |
| Ladders (1910.25 – .27) Sturdy / good condition | | Yes | 1 | No | |
| Training received / documented | - | Yes | + | No | |
| | - | out annous | | | |
| Overhead Crane (1910.179) | _ | Applicable | ×. | Not Applicab | le |
| Written procedures | - | Yes | + | No | |
| Training received / documented | _ | Yes | + | No | |
| Rated load markers | | Yes | + | No | |
| Warning devices (power travel mechanism) | _ | Yes | - | No | |
| Inspection / testing / certification | | Yes | 1 | No | |
| PPE (1910.132, .133. & .135138) | | Applicable | X | Not Applicab | le |
| Proper type / selection / use | | Yes | | No | |
| Hazard assessment conducted | _ | Yes | 1 | No | |
| Respiratory Protection (1910.134) | | Applicable | Y | Not Applicab | ble |
| Proper type / selection / use | | Yes | 1 | No | |
| Medical surveillance / fit-testing | | Yes | T | No | |
| | | | - | | |
| Walking / Working Surfaces (1910.22) | 1 | Applicable | | Not Applicat | ble |
| Floors / aisles dry | X | Yes | _ | No | |
| Floors / aisles unobstructed | X | Yes | | No | |
| Openings guarded | <u>AiA</u> | Yes | | No | |
| Welding, Cutting, Brazing (1910.94 & 251255) | | Applicable | V. | Not Applicat | ble |
| Local exhaust ventilation | | Yes | 1 | No | |
| Exposure assessment conducted | | Yes | | No | |
| Guards / barriers | | Yes | 1 | No | |
| Duilding Material Magazda | | | | | |
| Building Material Hazards | | | | | |
| Asbestos | 2 | Yes | | No | |
| Suspect materials present | | Yes | | No | If yes, obtain copy CTT2 |
| Is there an ACM Inspection Report | | 105 | | 110 | " fast server aski to the |
| Lead | 315 | | | | / |
| Peeling paint present | _X | Yes | | No | If yes, collect bulk sample |
| 164 | | | | | |
| Mold Is there evidence of moisture intrusion? | X | Yes | | No | |
| | - | Yes | - | No | |
| Is there current moisture intrusion? | | | - | No | |
| Is there visible mold growth? | | Yes | V | 140 | |
| | | | | | |

Page 2 of 2

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Industrial Hygiene Site Assessment Visit (IHSAV) Scope of Work (Checklist) Revised: May 14, 2014



| Done | Task | | | | | | |
|------|--|--|--|--|--|--|--|
| / | Review File: Past IHSAV Reports (determine additional tasks to be completed) & completed forms | | | | | | |
| 1 | Opening Conference: intro, IHSAV summary, ID POC's, review Facility Work Activities, ID Non-DoD Contractors (o/w separator, laundry, tools, pest control, rags, haz waste, refuse, crane maint., etc.), & discuss civilian activities performed onsite (use of drill floor or other facilities). | | | | | | |
| / | Complete Facility Information Form | | | | | | |
| 1 | Record Adjacent Properties (North, South, East, West) | | | | | | |
| ~ | Safety Program / SOP Review: review safety programs, list those present & date of most recent revision | | | | | | |
| ~ | Safety Training Review: review training records, list topics covered & date of most recent training | | | | | | |
| 1 | Obtain/Review Pervious IH Assessments - ACM Survey (1992) | | | | | | |
| NA | Conduct Personal Breathing Zone Sampling; record data in Exposure Sample Data Sheets | | | | | | |
| 1 | Collect IAQ measurements (collect outdoor control), record data on IAQ & Illumination Measurement Form | | | | | | |
| 1 | Collect Lighting Measurements, record data on IAQ & Illumination Measurement Form | | | | | | |
| | Collect metal wipe samples; record data on Wipe Sampling Summary Form | | | | | | |
| NA | Identify Exhaust Ventilation systems & collect measurements; record data on LEV System Survey Form | | | | | | |
| NA | Identify Noise Hazardous areas & collect sound level measurements; complete DD 2214 Noise Survey Form | | | | | | |
| 1 | Develop list of IH equipment used during IHSAV; record data on Equipment List Form | | | | | | |
| / | Asbestos Survey: identify whether facility has Asbestos Inspection Report, list suspect building materials present within facility; identify damaged suspect materials (take pictures) | | | | | | |
| 1 | Lead Paint Survey: identify whether facility has deteriorating paint, list areas & substrate where deterioration is occurring (take pictures), & collect bulk samples were paint is not adhered to substrate | | | | | | |
| / | Mold Survey: identify evidence of moisture intrusion (take pictures), identify any historic water intrusion / mold issues, identify presence or lack thereof mold growth | | | | | | |
| / | HVAC / Facility Ventilation Survey: conduct a general assessment of HVAC / facility ventilation system, define how fresh air is provided, & develop written summary | | | | | | |
| / | HAZMAT Inventory & Storage: obtain chemical inventory & evaluate areas where chemicals are stored | | | | | | |
| NA | POL Handling & Storage: evaluate how POL is handled & stored | | | | | | |
| NA | General & Tool Supply Area (If Present): evaluate general condition of tool & supply areas | | | | | | |
| ~ | Safety Walkthrough: Conduct a walk of the entire facility & document conditions, violations & findings; record data of | | | | | | |
| 1 | Complete Photo Log: including front / back of facility, sample locations & all conditions observed | | | | | | |
| NA | Converted IFR: Verify that historically an IFR was not present, if present conduct applicable lead samples. | | | | | | |

| Fire alarm in working conditionnot usually in place in older armories | / |
|--|-----------------------------|
| Fire extinguishers in place and properly identified and mounted | |
| Evidence of monthly fire extinguisher inspections | 10 |
| Annual fire extinguisher inspections tags current | ND |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | NA |
| Egress routes accessible and properly markednoted on Fire Evacuation Plan | |
| Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable) | / no documentation |
| Any Photo labs | 200 |
| Any hazardous noise sources | 10 |
| Light levels checked throughout building | ~ |
| Breaker panels properly labeled with no exposed wiring | |
| Check building occupancy 1. How many military personnel, how many civilian personnel 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | Yes no orber lian grouperts |
| Obtain two lead air samples | on IHSW Request Only |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | NA |
|--|---------------------------|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | NA |
| 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 | / |
| (Add Checklist to Report) | (Add Checklist to Report) |

FACILITY INFORMATION

(Information listed in First Section) (1st Few Paragraphs/Pages of Report)

1. Date Prepared:

2. Names (and Company Name) of Personnel Conducting Industrial Hygiene Site Assistance Visit:

3. Facility Name and Brief Summary of Primary Activities Conducted at Facility: Redmond Armory. Facility for a Mechanized Infantry Company w/ 1 DETACHMONT FROM HAC 1-101.

4. Facility Address: 17230 NE 95th St., Redmond, WA 98052

5. Primary Unit Assigned to Facility

- 6. Co-Tenant Units Assigned or Working Within Facility (LIST ALL): DET 2, HHC 1-161 (CAB)
- 7. Square Ft. Area of Facility: ~_____ft ²
- 8. Work Schedule: 0700 1700 M-F
- 9. Number of work bays: 0

10. Equipment Density and Type: N/A-

ed at Facility: M900 a. List Equipment Nomenclature Serviced of Maintained at Facility: M998, M1165, M1078

b. List Total Number for Each Nomenclature Serviced or Maintained at Facility: 1- M998,

11. Total Number of Personnel: 3 A GR; 1-2(A CD); GC (GT 2)

- 12. No. of Admin. Personnel (Include Status 2
- 13. No. of Maintenance Personnel (Include Status 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

PAGE 1 of 2

17. Total Number of Personnel Enrolled in the Vision Program: 0

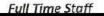
18. Facility Commander:

a. Email address, Commercial Telephone Number and Unit Assigned to: 425-497-3601, A Co. 1-161 (CAB)

19. Safety Officer:

- a. Email Address, Commercial Telephone Number and Unit Assigned to: 206-618-7045, A Co 1-161 (CAB)
- 20. Facility Telephone Number: 425-497-3601

Page 2 of 2





Equipment List - YELLOW CASE Facility: <u>REDMAND</u> ARMORY 501 Date: 21 MAY 2014





| Model Number | Serial Number | Calibration Date |
|--------------|-------------------------------|---|
| IQ-410 | 01-936 | January 2014 |
| 8385A | 02110331 | July 2013 |
| 407026 | Q105859 | October 2013 |
| 2900 | CDG060006 | June 2013- |
| QC-10 | QIF010094 | July 2013 |
| N/A | 13520 / 13517 | N/A |
| | | |
| | | |
| | IQ-410 8385A 407026 | IQ-410 01-936 8385A 02110331 407026 Q105859 |

Armory Rodmond Bldg 5019 500 5/21/14 Hazant Storege Area 1-Loclar to ster arosol points 1. Locar to store cleaners Inuntary up to date as of 2 months ego Storage in good. Chemicals are regregated to awid incompatibles. Hazwoote stored in different building

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 728 of 980

Ar. my Redmond Blyg Sol, Sec. 5/31 4 (Ommendables 556 Julio Gonzalez 556 Michael Cumonayon Vanina Emergency Pep (at 2013) Environmental Compliance Officer (ECO) Sufely (Sep 2012) Materials flendling (Unable to Find records Revolution completed ringuest Ŧ Hozado Equipment - No rehicles serviced charte, Munturned (Stord ande). HMMUV UP Armon is HIMMWV LMIV

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 729 of 980

1/50 FACILITY 2 ē Sec Photo log S W 1 and 1 - so deterioristing mint discussed ? 2 sould petities of while wint an 100 counter black cell; 1 lot blue mit ugen sec - very mark a small and pt determention on will arginters no sample MOLD staining in miling tillity 400 when where water love with 122A ; Highters where a general believed at y no Co found hade freily which fleshing set above even staring in er in caple locations VERELACK Y Misc carpet threesphert, held dot, degrade IAG is. 2% -= principly day you'd storage

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 730 of 980

| 町 | Asbestos | | |
|--------------|--|----------------------|--|
| 150) | - Survey from 1992 1 | 1500 | |
| is. It was t | · 12 With Vit & mayte | B. 14 1984 | Buse inc mashe |
| 7,750 ft2 | · Breezen sinshe | 8350 (t ¹ | impet was the (?) |
| | · TSI · filmgloss with | - | 2 +4 47 |
| | · Daywill ; it , tak compared) | | 151 - Klan years warp |
| | 2'24' ct lune beten | | DW. It. tox compand |
| | .: conjet mohe (?) | | 1,9 FT is majbe (under compet) |
| | | | |
| | ACM Reachback in 1992, Absted in 1999 | a | |
| | | | |
| | | | |
| | | | |
| | | | and the second |
| | HVAC . | | |
| 501 | rabunt will beat | | |
| | - no fittel as supply factors. | | |
| | - frain eir mandel tin geneunder | | |
| | | | |
| 500 | - calment will docted | | |
| | - no done or should suppry | achure | |
| | - trash our form aper was | leni. | |
| | tight and my my dull write | | |
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Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 731 of 980

Armory Rodmand Bldg Soig Soo 5/21/14 Haznak Storage Area 1-Luker to store Butteries 1-hocker to store appel points 1 - Locler to slove cleaners Inintoy up to date as of 2 months eggs Storige in good chemicals are regregated to avoid incompatibles. Hazwash stored in different building

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 732 of 980



. pe Sampling Summary For.

Facility: PEDMOND ARMORY - 500/501



Collected By: BW

Date & Time: 21 MAY 2014 @ ILAM Revised: September 18, 2013

| s | ample Information | 1 | Sample Area | Area Units | Analyte(s) |
|--------|-------------------|---|----------------|----------------|------------|
| S | ample Number: | 052114-RA500-W-01 | | 0.2 | |
| 1 S | ample Location: | Room 112, dining hall, near exit, floor | 1 | ft2 | |
| 2 5 | ample Number: | 052114-RA500-W-02 | | | |
| | Sample Location: | kitchen, Counter top | | | |
| 3 5 | Sample Number: | 052114-RA500-W-03 | | | |
| | Sample Location: | entry way, floor | | | |
| 4 5 | Sample Number: | 052114- RA500-W-04 | | | |
| | Sample Location: | HQ Platoon, carpet, floor | | | |
| S | Sample Number: | 052114- RASOD-W-05 | | | |
| 5 5 | Sample Location: | poom 101, classroom, desictop | | | |
| | Sample Number: | 05214- RAS00-W-06 | | | |
| 6 5 | Sample Location: | vault in supply room, floor | 4 | 4 | |
| 7 5 | Sample Number: | 052114-PASOQ-BULK-01 | | h | |
| | Sample Location: | Paint chip sample, main hall outside room 122A | NA | | |
| | Sample Number: | 052114-RA5000-W-07 | 1 | A2 | 100 |
| 8 5 | Sample Location: | Nault, outside, west, floor | | | |
| | Sample Number: | 052114-B 500-W-01 | 1 | 1 | |
| 9 | Sample Location: | Redmond Room, Stimulator Pm carpet, floor | | | |
| | Sample Number: | 052114-B500-W-02 | | | |
| 10 | Sample Location: | claseroom three, desktop | | | |
| | Sample Number: | 052114-B500-W-03 | | | |
| 11 | Sample Location: | hallway, south end of bidg, outside women's restroom | | | |
| 12 | Sample Number: | 052114-B500-W-04 | | | |
| | Sample Location: | Wall Locker room 10, carpet, floor | | | |
| | Sample Number: | 052H4-8500-W-05 | | | |
| 13 | Sample Location: | | 4 | $ \downarrow $ | |



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A Illumination Measureme....s

Facility: REDMOND ARMORY-MORE 501



Date: 21 MAY 2014 Revised: September 18, 2013

| | Location | CO ₂ 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) |
|----------------|----------------------------|--|---|---------------------------------------|---|----------------------|
| | Orderly Room 122A | 755 | 68.5 | 48.6 | 1.8 | 55.8 |
| | Simulator Room 120 | 492 | 68.7 | 47.0 | 1.6 | 72.8 |
| | Women's Vestroom 119 | 549 | 69.0 | 47.0 | 1.7 | 100.4 |
| | Office 114 | 612 | 68.9 | 46.0 | 1.7 | 48.1 |
| ining Hall- | 200m 112 | 608 | 69.0 | 45.7 | 1.7 | 64.6 |
| | kitchen III | 604 | 69.0 | 45.4 | ط.ا | 34.8 |
| | Supply room | 651 | 69.6 | 45.7 | 1.8 | 37.9 |
| | CBRN ROOM | 543 | . 70.1 | 44.3 | 1.8 | 55.7 |
| | Readiness NCO 122B | 781 | 70.I | 45.6 | 1.9 | 60.1 |
| AGR | Locker voom 103 | 624 | 70.2 | 44.6 | 2.0 | 62.4 |
| | HQ Platoon 106 | 605 | 69.9 | 44.1 | 1.9 | 88.1 |
| | Peadiness NCO DET 2 104 | 720 | 70.5 | 45.0 | 1.9 | 84.2 |
| | foon 101 classroom | 761 | 68.9 | 45.0 | 1.9 | 67.7 |
| | Executive office 125 | 722 | 60.4 | 45.1 | 1.9 | 80.4 |

CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL = Short Term Exposure Limit

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 734 of 980

Pg

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Q & Illumination Measureme...cs

Facility: REDMAND ARMORY - 500 Date: 21 MAY 2014



Revised: September 18, 2013

| Location | CO ₂ 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) |
|---------------------------------|--|---|---------------------------------------|---|----------------------|
| REDMOND ROOM | 488 | 67:3 | 46.1 | 1.6 | 37.2 |
| classroom one | 506 | 67.5 | 46.3 | 1.5 | 65.8 |
| classroom three | 522 | 67.1 | 46.5 | 1.5 | 79.4 |
| Question 2nd Later office | 503 | 67.5 | 46.6 | 1.6 | 59.2 |
| Men's restroom | 554 | 66.7 | 48.3 | 1.5 | 50.8 |
| entry | 515 | 67.4 | 48.9 | 1.5 | 99.5 |
| outside women's room | รท | 67.5 | 48.6 | 1.5 | 79.7 |
| DAY ROOM | 507 | 67.3 | 49.4 | 1.5 | 94.2 |
| Mortar platoon equipment mis | 514 | 67.0 | 49.7 | 1.5 | 61.2 |
| First Station | 494 | 67.6 | 49.9 | 1.5 | 67.9 |
| PET 2 officers POOM 7 | 521 | 66.7 | 49.4 | 1.5 | 35.0 |
| Wall Lockers Voom 4 | 498 | 67.5 | 49.2 | 1.4 | 62.7 |
| Sleeping area | 528 | 67.1 | 49.1 | 1.5 | 83.0 |
| Wall lockers Room 10 | 503 | 67.3 | 49,5 | 1.4 | 63.6 |

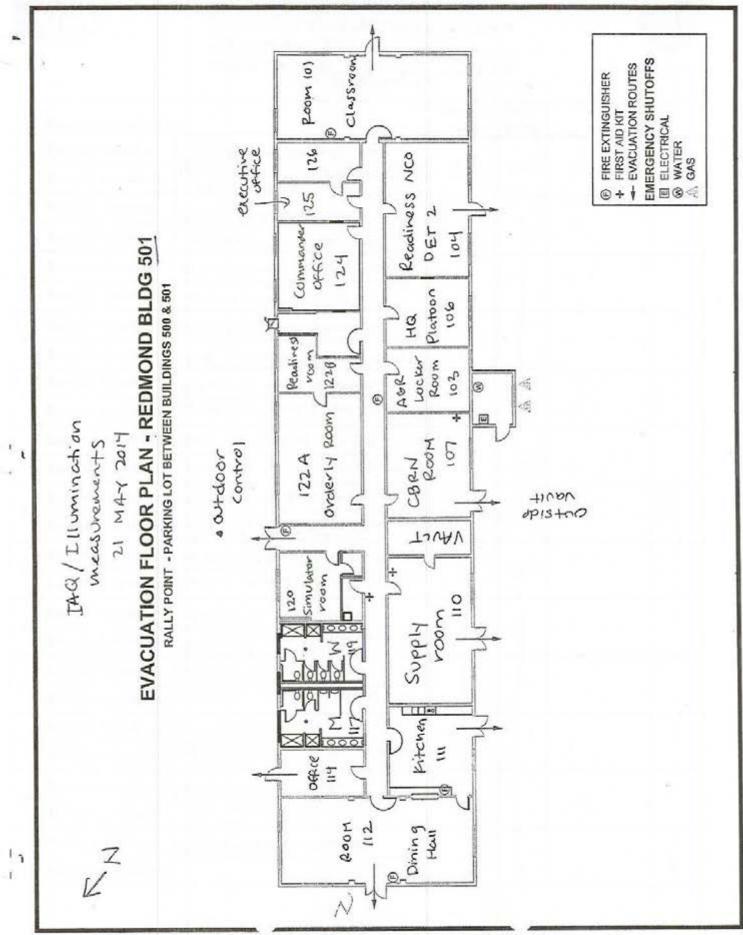
CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL = Short Term Exposure Limit



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 736 of 980



In G & Illumination Measureme...cs Facility: Redmond Armony -AMO 501 Date: 21 MAY 2014 Revised: September 18, 2013



| Location | CO2 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) |
|-------------------------|--|---|---------------------------------------|---|----------------------|
| Commander office 124 | 545 | 70-3 | 43.5 | 1.8 | 76.7 |
| outdoor control | -186 | 43.2 | 47.6 | 2.8 | × |
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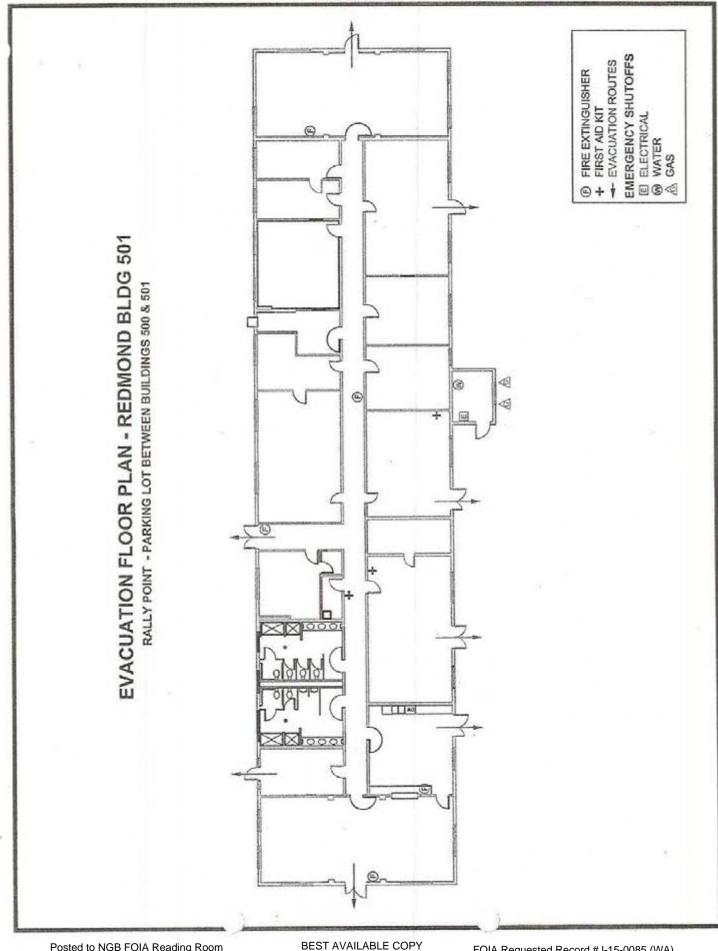
CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL = Short Term Exposure Limit



Posted to NGB FOIA Reading Room May, 2018

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 738 of 980



MICRO PRECISION CALIBRATION 22835 INDUSTRIAL PLACE GRASS VALLEY CA 95949 530-268-1860

Certificate of Calibration

Date: Oct 10, 2013

Cert No. 220081202166635

Customer: NETWORK ENVIRONMENTAL 1141 SIBLEY STREET FOLSOM CA 95630

| 이 아이 지금 것 | 28. 生产物的工具 | |
|-----------|------------|-------|
| Mort | Order #: | 11.52 |
| VVUIP | | |

| | | | 124.00 | |
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| and the second | | | | |
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| | 10.00 | 3. 清楚王氏 | single t | |
| | | | ~ 1- | 10.20 |

SAC-70062158

| MPC Control #: | CD3923 |
|----------------|-------------------------------|
| Asset ID: | N/A |
| Gage Type: | FOOT CANDLE/LUX METER W/PROBE |
| Manufacturer: | EXTECH INSTRUMENTS, INC. |
| Model Number: | 407026 |
| Size: | N/A |
| Temp/RH: | 68.8°F / 34.5 % |
| Calibration No | otes: |

| Serial Number: | Q10 |
|------------------------------|------|
| Department: | N/A |
| Performed By: | BAR |
| Received Condition: | IN T |
| Returned Condition: | IN T |
| Cal. Date: | Oct |
| Cal. Interval: | 12 N |
| Cal. Due Date: | Octo |
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5859/Z042817 RRY MORRIS OLERANCE OLERANCE tober 10, 2013 MONTHS ober 10, 2014

Standards Used to Calibrate Equipment

| 1000 | I-D | Description. | Model | Serial | Manufacturer C | al. Due Date | Traceability # | 1110 |
|------|--------|-------------------------|----------|---------|--------------------|--------------|----------------|--------|
| 1 | AW6244 | FOOT CANDLE / LUX METER | N/A | L871057 | EXTECH INSTRUMENTS | Apr 9, 2014 | 2200812107582 | |
| 100 | | UNIFORM SOURCE SYSTEM | USS-600V | 5609 | LABSPHERE | Oct 20, 2014 | 2342356 | To the |

Procedures Used in this Event

| | Procedure Name | Description |
|----|----------------|---------------------|
| 21 | 33K4-4-475-1 | DIGITAL LIGHT METER |

Calibrating Technician:







The reported expanded uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage 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 NIST Technical Note 1297, 1994 Edition. Services rendered comply with ISO 17025;2005, ISO 9001;2008, ANSI/NCSL Z540-1, MPC Quality Manual, MPC CSD and with customer purchase order 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. Recellbration cycles should be based on frequency of use, environmental conditions and customer's established systematic accuracy. The information on this report, pertains only to the instrument identified.

All standards are traceable to Si through the National Institute of Standards and Technology (NIST) and/or recognized national or international standards laboratories. Services rendered include proper manufacturer'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.

Page 1 of 1

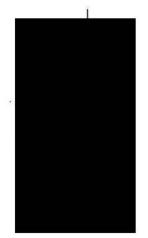
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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 739 of 980

| g Solutions | tificate |
|-------------------------|-----------------|
| GrayWolf Sensing | Calibration Cer |

| er: 01-936 n: ws2013.13 | <u>is:</u> re: 20.9°C ty: 32.0%RH re: 994.7mbar | 75.0%RH 75.0%RH | |
|--|--|---|--|
| Serial Number: 01-936 Display Software Version: ws2013.13 | Ambient Conditions: Temperature: 20.9°C Relative Humidity: 32.0%RH Barometric Pressure: 994.7mbar | 31.9%RH 31.9%RH | 100.0ppm 100.0ppm |
| Display | A B | 1.2%RH 1.2%RH | 466773-439 1.5ppm 1.5ppm |
| Probe Software Version: v1.3,1,1 | | <u>Relative Humidity:</u> Actual: Measured: | <u>Carbon Monoxide: s/n 10466773-439</u> Actual: 0.5ppm Measured: 0.5ppm |
| Probe | | 38.1°C 38.1°C | |
| | jiene SW | 20.5°C 20.5°C | 1250ppm 1250ppm |
| Q-410 Socket SoMo | lame: Industrial Hygie Date: 1/22/2014 Date: 1/22/2015 RA #: 140109MSIHS | 16.5°C 16.5°C | 375ppm 375ppm |
| Model Number of UUT: IQ-410 Display Model Number: Socket SoMo | Company Name: Industrial Hygiene SW Calibration Date: 1/22/2014 Calibration Due Date: 1/22/2015 RA #: 140109MSIHS | <u>Temperature:</u> Actual: Measured: | Carbon Dioxide: s/n JX 002577 Actual: Measured: |



GrayWolf Sensing Solutions GrayWolf Calibration Information: calibration.GrayWolfSensing.com Phone: (203) 402-0477 www.GrayWolfSensing.com

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 740 of 980

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| Company ID: I | HYGIENE SW | | FOI | umber. C | | | |
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| | ID: 02110331 | | Mc | del Number: 83 | 885A | | |
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| | on: AIR VELOCITY | | | | | | |
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| Pressure Accu | racy: ± 1.0% 01 Read | | | | | | |
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| | Cal: NORMAL tion: IN TOLERAN | ICE | | Cal D | ue Date: 19 | | |
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| Proced | ure: 33K6-4-1769 | -1 AIR VELOCIT | Y, TEMEPERATURE, F | LUN | perature: 23 Humidity: 48 | | |
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| Rema | irks: A test uncertaint | ly ratio (10R) 013.14 | | | | | |
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| Tektronix cert | ifies the performar | nce of the above i | nstrument has been ver | ified using test | equipment of | known accurac | y, its |
| | | | NIST, NPL, P⊤B) that th ANSI/NCSL Z540.1- | | e internation | | |
| | | | | | ektronix | | |
| This certificat | e shall not be repro | oduced, except in | full, without the written | permission or i | CITE OF INC | | |
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| | | | Calibration Standa | rds | | | |
| NIST Traceable# | Inst. ID# | Descripti | on | Manufacturer | Model | Cal Date | Date Due |
| 10333 | 01-0287 | RESONANT SE | NSOR BAROMETER | DRUCK | DPI 141 | 10Dec2012 | 10Dec201 |
| J9475 | 01-0818 | | EMPERATURE METER | VAISALA | HM34C | 01Mar2013 | 01Mar201 |
| 7048264 | 01-0858 | PRESSURE MO | DDULE (10 INCHH2O ±0.06%FS) | ASHCROFT | AQS-1 | 07Feb2013 | 07Feb201 |
| | | | and the second secon | | | AND A DECK OF A DECK | Determiner (* 18. |
| 1946 (| Greenspring Dr Su | ite A • Timonium, | MD 21093 • Phone: 410 |)-842-1000 • Fa | x: 410-842-1 | 002 | |
| Poste | ed to NGB FOIA Reading | ng Room | BEST AVAILABLE COP | FOIA | Requested Rec | ord #J-15-0085 (W | |
| May, | 2010 | | | | Released by N | ational Guard Bure Page 741 of 9 | |

TABLE 1 LEAD WIPE SAMPLE RESULTS ARMORY REDMOND REDMOND, WA MAY 21, 2014

| Sample Number | Building | Sample Area | Results (µg/ft ²) | ARNG Standard (µg/ft ²) |
|-------------------------|----------|---|----------------------------------|---|
| 052114-RA501-W-01 | | Room 112, Dining Hall, Near Exit, Floor | <1.3 | \leq 40 µg/ft ² |
| 052114-RA501-W-02 | | Kitchen, Countertop | 1.6 | \leq 40 μ g/ft ² |
| 052114-RA501-W-03 | | Entryway, Floor | 1.6 | \leq 40 μ g/ft ² |
| 052114-RA501-W-04 | 501 | HQ Platoon, Carpet, Floor | <1.3 | $\leq 40 \ \mu g/ft^2$ |
| 052114-RA501-W-05 | | Room 101, Classroom, Desktop | 1.7 | \leq 40 μ g/ft ² |
| 052114-RA501-W-06 | | Vault in Supply Room, Floor | 12 | \leq 200 µg/ft ² |
| 052114-RA501-W-07 | | Vault, Outside, West Floor | 27 | $\leq 200 \ \mu g/ft^2$ |
| 052114-B500-W-01 | | Redmond Room, Simulator Room, Carpet, Floor | <1.3 | \leq 40 μ g/ft ² |
| 052114-B500-W-02 | | Classroom Three, Desktop | <1.3 | \leq 40 µg/ft ² |
| 052114-B500-W-03 | 500 | Hallway, South End of Building, Outside Women's Restroom | <1.3 | \leq 40 µg/ft ² |
| 052114-B500-W-04 | | Wall Locker Room 10, Carpet, Floor | <1.3 | \leq 40 µg/ft ² |
| 052114-B500-W- Blank | | Blank | <1.3 | \leq 40 µg/ft ² |

 $\mu g/in^2$ = micrograms per square inch

ARNG = Army National Guard

ND = none detected at or above the analytical detection limit

Bold = Above ARNG Standard limit

TABLE 2 BULK PAINT CHIP SAMPLES

| Sample Number | Building | Sample Location/Description | Results (% Lead) | EPA/HUD Standard |
|--------------------------|----------|--|---------------------|---------------------|
| 052114-RA501- Bulk-01 | 501 | Paint Chip Sample, Main Hall, Outside Room 122A | <0.0013 | ≤0.5% |

EPA = Environmental Protection Agency

HUD = The US Department of Housing and Urban Development

Bold = Denotes sample results exceed the EPA/HUD standard and is considered to be lead-containing paint.



ANALYTICAL REPORT Amended-20140619

Report Date: June 19, 2014

Network Environmental Systems, Inc. 1141 Sibley Street Folsom, CA 95630 Phone: (916) 353-2360 Fax: (916) 353-2375

Workorder: 34-1414417 Client Project ID: BLDG 500/501 Purchase Order: 013.IH1716.18 Project Manager:

| Analytical | Resul | ts |
|-------------|-------|----|
| Allalytical | nesu | 10 |

| Sample ID: 052114-RA501-W-01 Lab ID: 1414417001 | Sampling Location: BLDG 500/501 | | | Collected: 05/21/2014 Received: 05/23/2014 | | |
|--|---------------------------------|--|----------------|---|--|--|
| Method: NIOSH 7300 Mod. | Samplin | Prepared: 05/30/2014 Analyzed: 05/30/2014 | | | | |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | | | |
| Lead | <1.3 | <1.3 | 1.3 | | | |

| Sample ID: 052114-RA501-W-02 Lab ID: 1414417002 | Sampli | Sampling Location: BLDG 500/501 | | |
|--|---|---------------------------------|----------------|--|
| Mothod: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 1.6 | 1.6 | 1.3 | |

| Sample ID: 052114-RA501-W- |)3 Sampli | ng Location: BL | DG 500/501 | Collected: 05/21/2014 Received: 05/23/2014 |
|----------------------------|--------------|-------------------------------|----------------|---|
| Method: NIOSH 7300 Mod. | Samplin | Media: Gh g Parameter: Are | | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 1.6 | 1.6 | 1.3 | |

| Sample ID: 052114-RA501-W-04 Lab ID: 1414417004 | Sampli | ng Location: BLDG | 500/501 | Collected: 05/21/2014 Received: 05/23/2014 |
|--|-----------|-------------------------------------|---------------|---|
| Method: NIOSH 7300 Mod. | Samplin | Media: Ghost g Parameter: Area 1 | | Prepared: 05/30/2014 Analyzed: 05/30/2014 |
| Analyte | ug/sample | ug/ft ² R | L (ug/sample) | |
| Lead | <1.3 | <1.3 | 1.3 | |

| 102 | ADDRESS 960 West LeVoy Drive, Salt Lake City, Utah, 84123 USA PHONE +1 801 266 7700 FAX +1 801 268 9992 |
|-----|---|
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AMALYTICAL REPORT Amended-20140619

Workorder: 34-1414417 Client Project ID: BLDG 500/501 Purchase Order: 013.IH1716.18 Project Manager

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.iowadnr.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.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.

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.



ANALYTICAL REPORT Amended-20140619

| Workorder: | 34-1414417 |
|--------------------|---------------|
| Client Project ID: | |
| Purchase Order: | 013.IH1716.18 |
| Project Manager: | |

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.iowadnr.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.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.

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.

| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | 1414417 | AL AL A | | ANALYTIC | AL REQ | UEST FORM | |
|--|---|--|------------------|----------------------|-----------------------------|--|----------|
| RESULTS REQUIRED BY DATE CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES D52114 Purchase Order No. (D13, TH171Lb. (%) 4. Quode No. ALS Project Managor ALS Project Managor Sample Collection Sample Collection Sample Collected L1 2014 The Collected L1 2014 The Collected L1 2014 The Collected L1 2014 The Collected L1 2014 Chain of Custody No. | | | | 1. 🖄 REGULAR | R Status | 1914417 | |
| DATE DATE CONTACT ALS SALT LAKE PRIOR TO SENDING SAMPLES D52114 Purchase Order No. $Ols. TH1714 (%) 4. Quote No$ | | | | RUSH Sta | tus Requested - | ADDITIONAL CHARGE | |
| 252114 Purchase Order No. $023. TH1716.1\%$ 4. Quote No. ny Name NES IN C ALS Project Manager s 1141 Sibley Siveet Sample Collection collection Sampling Site BLD6 Scol 1501 io Industrial Process Date of Collection collection S121 / 2014 rate Time Collection S121 / 2014 rate Chain of Custody No. Chain of Custody No. collection S2114 - PAScer-wase Industriat collection S214 - PAScer-wase Industriat collection Semple Volume ANALYSES RECUESTED - Use method number if Known Units** collection collection Industriat Industriat Industriat collection collection | AL | 3 | | | | DATE | |
| Name NES INC as 1141 Sibley Street 5. as 1141 Sibley Street 5. bold Sampling Site BLDG 500 / 501 bold Industrial Process Date of Collection Signal conne Date of Collection Signal Date of Collection Signal conne Date of Collection Signal Date of Collection Signal Date of Collection Signal conne Date of Shipment Date of Shipment Chain of Custody No. Chain of Custody No. Chain of Custody No. Signal Chain of Custody No. Signal Signal <td></td> <td>_</td> <td></td> <td></td> <td></td> <td></td> <td></td> | | _ | | | | | |
| s 1141 Sibley Street 5. sample collection Sampling Sile BLDG 500 (50) Industrial Process Date of Collection $5/21/2014$ Industrial Process Date of Collection $5/21/2014$ Time Collected 11:00 Ann Date of Shipment Chain of Custody No. 6. How did you first learn about ALS? EST FOR ANALYSES ratory Use Only Client Sample Number Matrix* Sample Volume ANALYSES REQUESTED - Use method number if known Units** Cos 1 - 03 - 1 - 07 - 1 - 1 - 07 -03 - 07 - 1 - 1 - 07 052114 - PASOD - 0.01 - 01 BUIK $052114 - PASOD - 0.01 - 01 BUIK - 02 - 03 - 03 - 01 - 03 - 03 - 01 - 03 - 03$ | Date 052114 | | 5.1.41710 | 0.(2) | F | | |
| BLSOWL (A Sampling Site $\underline{R} \underline{LDG} \underline{SOO} \underline{/SO1}$ to Industrial Process ep Date of Collection $\underline{S} \underline{/21} \underline{/2014}$ Add Date of Collection $\underline{S} \underline{/21} \underline{/2014}$ Address (if different from above) Chain of Custody No. | | | | | | | |
| to Industrial Process one Date of Collection opp State of Collection Add Date of Collection Address (if different from above) Chain of Custody No. | | and the second | 21 | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | _ Folson, (| .4 | | | | | |
| ep Time Collected11:00 And | Person to | | | | 1970/001115/88356568002.54P | | |
| Add Date of Shipment Address (if different from above) Chain of Custody No. 6. How did you first learn about ALS? EST FOR ANALYSES ratory Use Only Client Sample Number Matrix* Semple Volume ANALYSES REQUESTED - Use method number if known Units** OS2114 - PASotp-Noi W.P.P. If F+2 N i OS+1 OS2114 - PASotp-Noi W.P.P. -03 Image: Construction of the construle of the construction of the construc | Telephone | | | | | | |
| Address (if different from above) Chain of Custody No. 6. How did you first learn about ALS? EST FOR ANALYSES ratory Use Only Client Sample Number Matrix Semple Volume ANALYSES ratory Use Only Client Sample Number Matrix Semple Volume ANALYSES Chain of Custody No. 052114-PASOR-N-oi 052114-PASOR-Burk-oi 02 1 | Fax Telep | | | | | | |
| 6. How did you first learn about ALS? EST FOR ANALYSES ratory Use Only Client Sample Number Matrix* Semple Volume ANALYSES REQUESTED - Use method number if known Units** 052114 - PA500-N-vic W.P.C. -03 1 -03 1 -03 1 -03 1 -04 1 -05 1 -04 1 -05 1 -06 1 -07 1 -07 1 052114 - PA500-Box - 01 1 052114 - PA500-Box - 01 1 052114 - PA500-M-01 1 052114 - PA500-M-01 1 052114 - PA500-M-01 1 022114 - PA500-M-01 1 -02 1 -03 1 | E-mail Ad- | | | | The formation of the second | The state of the s | |
| EST FOR ANALYSES ratory Use Only Client Sample Number Matrix* Semple Volume ANALYSES REQUESTED - Use method number if known Units** O52114 - PA501 - W o P C I ft 2 N 1025H 73.00 Ing/ft -03 I 052114 - PA501 - B o I L o P C I ft 2 N 1025H 73.00 Ing/ft -03 I 052114 - PA500 - W o I L o P C I ft 2 N 1025H 73.00 Ing/ft -03 Ing/ft -03 Ing/ft I | Billing Address (if different | (from above) | | | | | |
| ratory Use Only Client Sample Number Matrix* Sample Volume ANALYSES REQUESTED - Use method number if known Units** 052/14 - PA50tb - Nroi W · P · P · I · F · N · OSH 7300 mg/f4 052/14 - PA50tb - Nroi W · P · P · I · F · N · OSH 7300 mg/f4 -03 -03 -03 -03 -04 -03 -04 -04 -05 -04 -04 -04 -05 -05 -04 -04 -05 -05 -04 -04 -05 -05 -04 -04 -05 -05 -06 -07 -05 -07 -07 -06 -07 -07 -07 -07 052/14 - PA500 - Box - 01 Box R PP m 052/14 - PA500 - Box - 01 164 - 2 N10SH 7300 mg/f4 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 | | | | 1 | 6. How did you | I first learn about ALS? | |
| ratory Use Only Client Sample Number Matrix* Sample Volume ANALYSES REQUESTED - Use method number if known Units** $052.114 - PA50tb - Noil W \cdot P \cdot $ | | | | | | | |
| ratory Use Only Client Sample Number Matrix* Semple Volume ANALYSES REQUESTED - Use method number if known Units** 052/14 - PA50tb - Woil W: P.E 1 ft - 2 N 105H 7300 mg/ft 052/14 - PA50tb - Woil W: P.E 1 ft - 2 N 105H 7300 mg/ft 052/14 - PA50tb - Woil W: P.E 1 ft - 2 N 105H 7300 mg/ft -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 -04 -03 -03 -04 -03 -03 -04 -03 -04 -0 | 3 | | | | - | | |
| ratory Use Only Client Sample Number Matrix* Sample Volume ANALYSES REQUESTED - Use method number if known Units** 052/14 - PA50tb - Nroi W · P · P · I · F · N · OSH 7300 mg/f4 052/14 - PA50tb - Nroi W · P · P · I · F · N · OSH 7300 mg/f4 -03 -03 -03 -03 -04 -03 -04 -04 -05 -04 -04 -04 -05 -05 -04 -04 -05 -05 -04 -04 -05 -05 -04 -04 -05 -05 -06 -07 -05 -07 -07 -06 -07 -07 -07 -07 052/14 - PA500 - Box - 01 Box R PP m 052/14 - PA500 - Box - 01 164 - 2 N10SH 7300 mg/f4 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 -02 | REQUEST FOR ANALYS | ES | | | | | |
| $\begin{array}{c c c c c c c c c c c c c c c c c c c $ | Laboratory Use Only | | Matrix* | Sample Volume | ANALYSES R | EQUESTED - Use method number if known | Units** |
| 052114-PA501-W-02 -03 -04 -05 -06 -06 -07 -07 052114-PA507-BUIK-01 BUIK 052114-PA507-BUIK-01 BUIK 052114-B500-W-01 WIPE 1ft ² NIOSEL 7300 Mg/H -02 -03 | | 057114- RASOD-W-01 | Wipe | 16+2 | NIOSI | 1 7300 | mylfi |
| -03 -04 -05 -05 -05 -07 -07 -07 -07 -07 -07 -07 -07 | | | 1 | | | | 1 |
| -04 -05 -06 -06 -07 -07 052114-PASOR-BUIK-01 BUIK 052114-B500-W-01 WIPE 1Ft2 NIOSH 7300 -02 -03 | | | | | | | |
| -06 -07 052114-PASOR-BUIK-01 BUIK 052114-B500-W-01 WIPE 1Ft2 NIDSH17300 Mg/H -02 -03 | | | | | | | |
| -07 L L L 052114-PASOR-BUIK-01 BUIK 052114-B500-W-01 WIPE 1Ft2 NIOSH 7300 Mg/H -02 | | | | | - | | |
| 052114-PASOR-BUIK-01 BUIK 052114-B500-W-01 Wige 1ft2 NIOSH 7300 mg/H -02 -03 -03 -00 -00 -00 -00 -00 -00 -00 -00 | | 06 | | | | | |
| 052114-PASO-WHOI WIPE 1Ft2 NIDSH17300 Mg/H -02 -03 -03 -04 -01 -01 -01 -01 -01 -01 -01 -01 -01 -01 | | -67 | L. | L | | <u> </u> | 1.1 |
| 052114-B500-W-01 Wipe 16+2 NIDSH17300 mg/H -02 -03 -03 -03 -03 -03 -03 -03 -03 -03 -03 | | 052114-PASOD-BUIK | -01 BUIK | | | | ppm |
| -02 | | | | | 1 | | _ |
| -02 | | 052114-B500-W- | of wipe | 16+2 | NIDSE | 17300 | male |
| | | | | | | | <u> </u> |
| | | -03 | | | | | |
| | | -04 | 1 | 1- | | | |
| 052114-BSOO-W-Hunk wije - Myth | | 052114-BS00-W- | lunk wipe | | | 1 | might |
| 052114-BSOD-W-llunk wipe - | ** 1. μg/sample 2. mg/m ³ | 052114-PASOD-BUIK 052114-B500-W- -02 -03 -04 052114-B500-W- 252114-B500-W- 252114-B500-W- 252114-B500-W- 252114-B500-W- 252114-B500-W- 252114-B500-W- 252114-B500-BUIK -02 -03 -04 -052114-B500-W- -02 -03 -04 -052114-B500-W- -02 -03 -04 -052114-B500-W- -04 -052114-B500-W- -04 -052114-B500-W- -04 -052114-B500-W- -04 -052114-B500-W- -04 -052114-B500-W- -052 -04 -052114-B500-W- -052 | 01 10:pe | n; Bulk sample; Blo | od; Urine; Tissue | ; Soil; Water; Other | |
| | pecify: Solid sorbent tub | be, e.g. Charcoal; Filter type; | Impinger solutio | n; Bulk sample; Blo | od; Urine; Tissue | ; Soil; Water; Other s in the column entitled Units** | |
| y: Solid sorbent tube, e.g. Charcoal; Filter type; Impinger solution; Bulk sample; Blood; Urine; Tissue; Soli; Water; Other | | 3. ppm 4. % 5. μg/m [*] | | , i lease indicate (| | | |
| ample 2. mg/m ³ 3. ppm 4. % 5. µg/m ³ 6 (other) Please indicate one or more units in the column entitled Units ^{-**} | comments | <u></u> | | | | | |
| ample 2. mg/m ³ 3. ppm 4. % 5. µg/m ³ 6 (other) Please indicate one or more units in the column entitled Units ^{-**} | | | | | | | |
| ample 2. mg/m ³ 3. ppm 4. % 5. µg/m ³ 6 (other) Please indicate one or more units in the column entitled Units ^{-**} | Possible Contamination and | les Chamiant Hazarde | | | | | |
| ample 2. mg/m ³ 3. ppm 4. % 5. µg/m ³ 6 (other) Please indicate one or more units in the column entitled Units s | . Chain of Custo | | | | | | |
| ample 2. mg/m ³ 3. ppm 4. % 5. µg/m ³ 6 (other) Please indicate one or more units in the column entitled Units s Contamination and/or Chemical Mazards | | | | | _ Date/Time | | |
| ample 2. mg/m³ 3. ppm 4. % 5. µg/m³ 6 (other) Please indicate one or more units in the column entitled Units** s Contamination and/or Chemical Mazards of Custo hed byDate/Time | elinguished by | | | | Date/Time | 15-23-14 9.8 | 0 |
| ample 2. mg/m³ 3. ppm 4. % 5. µg/m³ 6. (other) Please indicate one or more units in the column entitled Units ²⁴ s | | | | | | AND AND A COMPANY OF A CARD AND A | |
| ample 2. mg/m³ 3. ppm 4. % 5. µg/m³ 6. (other) Please indicate one or more units in the column entitled Units s | Received by | | | | DataTimo | | |
| ample 2. mg/m³ 3. ppm 4. % 5. µg/m³ 6. (other) Please indicate one or more units in the column entitled Units** s | Relinquished by Received by Relinquished by | | | | | 3 | |

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| Redmond Armory |

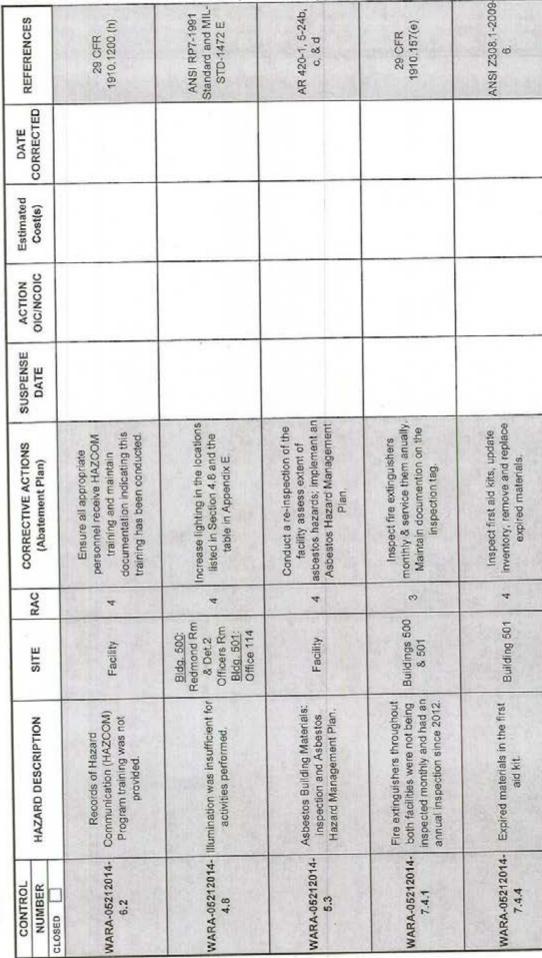
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| ndustrial Hygiene So | Violation Invento | /E ACTION - COMPLIA |
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Y AND HEALTH STANDARDS Redmond Armory, Redmond, Washington LOG OF SCHEDULE OF



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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 Redmond Armory. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.3.2 describes the following: the N is Conclusions & Recommendations and the 3.2 corresponds back to Section 3.2 – 3.0 Methods; Item 2 Indoor Air Quality).

N4.8 Illumination - Increase illumination in specified locations to provide a minimum of 50 foot candles. See Section 4.8 of the report or table in Appendix E for a list of locations with insufficient lighting.

N5.3 Asbestos Facility Survey – Conduct an asbestos survey in order to identify asbestos containing materials within the facility. If asbestos containing materials found, then develop and implement an Asbestos Hazard Management Plan.

N6.2 Hazard Communication Training - Ensure all appropriate personnel receive HAZCOM training and maintain documentation indicating this training has been conducted.

N7.4.1 Fire Extinguishers – Have annual servicing performed; perform monthly inspections of the fire extinguishers. Document servicing and inspection on the service tag.

N7.4.2 Broken Ceiling Tiles – Replace the broken ceiling tile in Building 501 to maintain fire rated construction and to provide sufficient support for the Exit Sign.

N7.4.3 Gas Odor – Periodically pour water down the drain in the men's bathroom to seal the P-Trap and prevent a gas odor.

N7.4.4 Expired First Aid Kit - Replace the expired materials in the First Aid Kit in Building 501 and note the new expiration dates.

N7.4.5 Main Entrance - Install a sign, marking or other communication of the step down when exiting Building 501.

N7.4.6 Wall Opening - Caulk or seal around the piping in Room 103 in Building 501 to seal the existing opening.

| FY 14 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 | |
| | 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 | THI | ΗT | IHT |
| Total number of DOEHRS-IH shops coded as Priority 1 | 953-02-10 | HT | IHT | IHT | THI |
| Number of buildings for which all processes requiring a basic industrial hygiene characterization have received one within the last 12 months | 953-02-11 | HT | IHT | HT | IHT |
| Number of buildings requiring a basic industrial hygiene characterization within the last 12 months | 953-02-11 | IHT | IHT | 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 | THI | HT | ΗT |
| Number of buildings requiring an industrial hygiene exposure assessment within the last 12 months | 953-02-12 | IHT | IHT | IHT | IHT |
| Number of processes that were assessed for potential inhalation exposure to employees during this IH Visit | 953-02-13 | IHT | IHT | ΗT | IHT |
| Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit | 953-02-13 | IHT | IHT | IHT | IHT |
| | | | | | |

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| FY 14 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 | THI | IHT | IHT |
| Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months. | 953-02-14 | IHT | THI | HT | IHT |
| Number of personnel who were reassessed by industrial hygiene within the last 12 months. | 953-02-15 | IHT | IHT | IHT | IHT |
| Number of personnel who required reassessment by industrial hygiene within the last 12 months. | 953-02-15 | THI | THI | THI | IHT |
| 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 | THT | IHT | THI | 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 | THI | IHT | IHT | 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 | THI | IHT | IHT | IHT |
| Number of personnel who require work shift dosimetry to quantify their daily noise exposures within the last 12 months. | 953-02-17 | THI | IHT | 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 | | | 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 | Η | IHT | IHT |
| Number of design review packages which required IH evaluation and recommendations applicable to occupational health concerns | 953-02-20 | IHT | μ | IHT | IHT |

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Redmond Armory Redmond, Washington

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| NES | | | Facility Info | AVAILABLE COPY Drmation Form ecember 4, 2013 | 1 | | |
|----------------------------|-----------|-------------------------------|--------------------|--|-------------------|-------------------|--|
| General Facility | Informat | tion | Date(s | s) of Previous IHSAVs: | 1992-Fo | ocus Asbes | stos |
| IH(s): | | | | Date(s) of IHSA | V: May 21 | , 2014 | |
| Facility Name: | Armory | r Redmond, Buildi | ng 500 & 501 | | | | |
| Address: | 17230 | NE 95 th St., Redn | nond, WA 95820 | | | | |
| Facility Comm | ander: | | | | | | |
| | | | | Name / Phone Numbe | r/email | | |
| Safety Officer: | | | -e | Name / Phone Numbe | r/email | | and the second sec |
| No Person(s): | 4 | Admin: | Maint: | Work Sched: | M-Th 0700-1700 | Size of Facility: | 501-7,764 ft ² 500-8,342 ft ² |
| | -AGR, Fee | d, Tech., IDR, Sta | te or Contract Emp | loyee) | | | |
| Unit(s): | | 1457 | HCC | Co-Tenant(s): | None | | |
| | - | Include UIC | if available | | | List | All |
| Primary work activities at | Admir | nistrative | | | U.N.M. | | |
| Facility: | | | | | | | |

Written Health & Safety Programs / SOPs

| Program | Program Needed | Have Program | Date of Last Training | # Enrolled | Comments |
|--|-------------------|-----------------|--------------------------|---|---|
| Confined Space | N | | | | |
| Emergency Preparedness | Y | Y | 17 Oct. 2013 | | |
| Hazard Communication | Y | Y | Unknown | | Verbally reported to have been completed, unable to find record. |
| Hearing Conservation | N | | | | |
| PPE | N | | 11 Staff (16 - 16 - 1 | | |
| Respiratory Protection | N | | | | |
| X Facility floor plan / o X List of equipment so X Previous IH reports NA = Not Applicable to | erviced / mai | | X X | Hazardous Personnel li Others (List | |
| Non – DoD Contractors | | | | | |
| Service | Provider | | | vice | Provider |
| Oil / Water Separator | NONE | | | ndry | NONE |
| Tools | NONE | | | t Control | NONE |
| Rags | NONE | | the second second second | ardous Wast | |
| Refuse | NONE | | | ne Maintenar | nce NONE |
| Others: | State ma | intenance h | andles facility ma | aintenance | |

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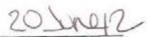
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Army National Guard <u>Armory</u> Survey (To Be Included In Report)

| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | No drill floor |
|--|---|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes. Samples 052114-RA501-01 through 07 & 052114-B500-W-01 to 04 |
| 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. | Yes, peeling paint pulled from hallway |
| Are there any signs of water damage or mold? | Yes, Minor water staining in CT, No mold growth |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | Yes, Suspected ACM in both buildings 12x12 VFT &Mastic, Base Cove Mastic, TSI, drywall joint tape and compound, 2x4 ceiling tiles, carpet mastic, 9x9 VFT & Mastic (Below carpet). |
| Quality of housekeeping | Very good: Some wearing & staining in carpet; but otherwise good |
| HVAC maintenance plan in place? | NA; No HVAC system, all wall mounted heating systems |
| Overall condition of HVAC system | N/A |
| Obtained CO2, Temp, RH monitoring | Completed, See appendix E |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | Yes, copy of inventory and SDS available. |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | Items stored in flammable storage cabinets. |

| 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 |
| Annual fire extinguisher inspections tags current | No |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | NA |
| 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, missing some documentation |
| Any Photo labs | No |
| Any hazardous noise sources | No |
| Light levels checked throughout building | Yes, See Illumination Measurement Form |
| Breaker panels properly labeled with no exposed wiring | Yes |
| Check building occupancy | 1. 4 Military |
| How many military personnel, how many civilian personnel What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | 2. Administrative See Facility Information Form |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | Yes; civil air patrol No other lease agreements |
| Obtain two lead air samples | NA On IHSW Request Only |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | N/A |
|--|-------------------|
| 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. | Yes |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | See photo log |
| Name of Armory, POC, phone #, address and organizations in Armory | Armory Redmond |
| (Add Checklist to Report) | Redmond, WA 98520 |



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

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

Industrial Hygiene Site Assistance Visit

Seattle Armory 1601 W. Armory Way Seattle, WA 98119

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

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

ARNG-CSG-P

09 SEP 2012

MEMORANDUM FOR One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

, The Adjutant General of Washington,

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Seattle Armory at 1601 W. Armory Way, Seattle, WA on 21 Jun 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 757 of 980

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Seattle Armory, Seattle, WA on 21 JUN 2012.

| 4. The technical point of contract information, contact the Octoor OHN | cupational Safety & Health Office, t (253) 912-3832. | R. |
|--|---|----|
| | | |
| | Chief, Industrial Hygiene | |
| CF Chief <u>, Occupational Health</u> DSS, CFM0 ASO, | 0 Fairview Dr, Carson City, NV 89701 2460 Fairview Dr, Carson City, NV 89701), 20,000 Army Aviation Dr, Reno, NV 89506 | |
| CF w/encl OHN, Facility Supervisor | 60 Fairview Dr, Carson City, NV 89701 20,000 Army Aviation Dr, Reno, NV 89506 | |



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ARNG-CSG-IHSW

10 September 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray, Tacoma, WA 98430

FOR Commander, Seattle Armory, 1601 W. Armory Way, Seattle, WA 98119

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Seattle Armory, 1601 W. Armory Way, Seattle, WA conducted on 21 June 2012.

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 Seattle Armory, 1601 W. Armory Way, Seattle, WA on 21 June 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.

Findings. See survey report.

4. Commendable.

a. None

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.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Seattle Armory, 1601 W. Armory Way, Seattle, WA conducted on 21 June 2012.

a. Armory should be <u>cleaned regularly</u> to capture residual lead dust or other heavy metals produced by weapons cleaning or vehicle maintenance and prevent migration of these metal contaminants. Utilize the Clean-Up SOP provided in this report to clean armory and weapons cleaning areas after every episode. (RAC 3)

b. <u>Haz Com program</u> should be initiated with a written program and chemical list in place. Each chemical should have a MSDS and the list should be updated periodically or when new chemicals are introduced. All HazCom training should be documented and documented in personnel's file. (para. 4.1.1 & 4.1.2, 5.1.1 & 5.2.1) (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.

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.

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.

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Seattle Armory, 1601 W. Armory Way, Seattle, WA conducted on 21 June 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 Washington 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

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

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.

- 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.

<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)

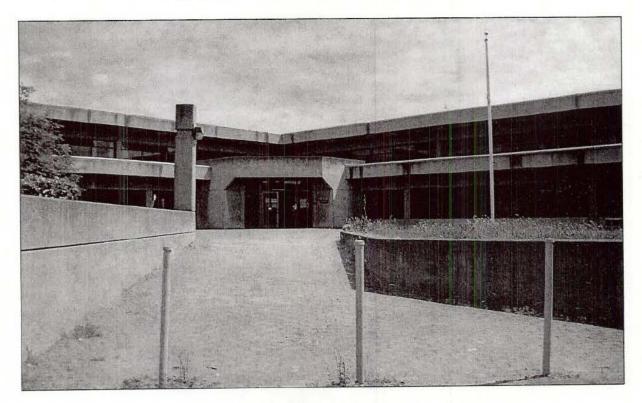
NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

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. <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 Services SITE ASSISTANCE VISIT



Army National Guard - Seattle Armory 1601 W Armory Way Seattle, WA 98119

Prepared for:

National Guard Bureau Industrial Hygiene Southwest

By:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, WA 98032

Project Number: ARNG12-001-15

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Washington Army National Guard Seattle Armory Follow-up IH SAV June 20-21, 2012

ATTACHMENTS

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|--------------|---|-------------------------------------|
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Follow-up IH SAV June 20-21, 2012

1.0 EXECUTIVE SUMMARY

On June 21st, 2012, 2012, Consulting Cole & Associates Training & Consulting, Inc. conducted a Follow-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Seattle Armory, 1601 W Armory Way, Seattle, WA 98119.

The primary point of contact for information gathered during this survey was at (206) 378-6423. The survey was conducted at the direction of National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a physical walk-through survey of the facility.

Findings in this report were obtained through observations at the facility and interviews with personnel. The purpose of this IH SAV was to re-evaluate the occupational environment of the facility, and to make recommendations for corrective actions or follow-up work to be completed during an annual re-inspection.

Lead dust wipe samples were taken in all areas accessible at the time of the inspection. These areas include but are not limited to the drill floor, hallways, classrooms, vaults and individual unit areas, Due to multiple deployments, these areas were limited.

The following inspection areas were evaluated with specific recommendations or corrective actions offered:

1.1 Recommendation 4.1.1

There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a facility hazardous materials inventory.

1.2 Recommendation 4.1.2

MSDS log/books should be updated, at a minimum, annually or when new chemicals are added to the inventory

1.3 Recommendation 5.1.1

A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned.

1.4 Recommendation 5.2.1

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

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Follow-up IH SAV June 20-21, 2012

2.0 INTRODUCTION

The Seattle Armory houses and supports multiple units with the primary unit being the 181st BSB Det. Currently there are eight other units occupying the building including the 176th Vert Det 1, Alpha 181, HHC 81st HBCT, 181st HQ Support Battalion Charlie Co Medical, Det 1 Bravo Co 181 and the Military Police (MP). The UICs (unit identification codes) are

The mission of Seattle Armory is to provide services to Washington Army National Guard units and employs up to 40 full time guard members. Drill weekends (IDT) are once a month per unit with up to 300 members at a time.

The structure was built in 1974 and comprises over 100,000 square feet on two floors. The facility is used for various types of activities including administrative, combat training, readiness training, recruiting, funeral honors, and military police.

Within the building are classrooms, storage areas, supply rooms, 9 vaults, a drill floor, a recruiting office, a chapel, an infirmary, kitchen, gym, computer room, mechanical room, maintenance shop, and a flammable storage room.

2.1 Follow-up SAV Objectives

The purpose of this follow-up SAV was to re-evaluate potential high lead levels identified from prior SAV results. This also includes interviews of armory personnel regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety.

2.2 Scope of Assistance Visit Services

This review of findings report is divided into the following sections:

Section 2 - Introduction

Section 2.3 - Recurring Observations

Section 3 - Survey Procedures

Section 4 - Survey Observations and Findings

Section 5 - Written Programs and Approvals

Section 6 - Limitations and Approvals

2.3 Recurring Observations

Information was gathered from the previous report and further observations were gathered from interviews and conversations with facility personnel. There were no major issues regarding recurring observations although the POC stated there was evidence of water damage in the assembly hall/drill floor area and on the exterior of the building.

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3.0 SURVEY PROCEDURES

Lead wipe samples were collected from dusty horizontal floor surfaces in the facility including but not limited to the drill floor, boiler room, storage/locker room and facility entrance way. "Lead Wipe™" brand wipes were used with a 72 square-inch template. The wipes used conform to American Standards for Testing Materials E1792-96A, *Standard Specification for Wipe Sampling Materials for Lead in Surface Dust*. The collected wipe samples were placed in clean, labeled centrifuge tubes. Samples were submitted to Reservoirs Environmental Inc. for analysis via Flame Atomic Absorption, USEPA Method SW846-(7420). Laboratory results are listed in micrograms of lead per square foot (µg/ft²). Copies of the raw analytical data are presented in Attachment 4.

The photos associated with the following section are included as Attachment 3.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel and laboratory analysis of samples taken in the field.

4.1 Hazardous Materials \ MSDS

A spot check of the chemical storage areas including flammable storage lockers was completed during this survey. All areas that were accessible were relatively organized although a current Hazardous Materials Inventory list for the facility could not be located.

MSDS binders were centrally located in the main hallway on the first floor however they were not current and up to date.

4.1.1 Recommendation

There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a facility hazardous materials inventory.

4.1.2 Recommendation

MSDS log/books should be updated, at a minimum, annually or when new chemicals are added to the inventory.

4.2 Lead Dust

There are currently no standards that dictate what a safe level of lead is from a wipe sample. However, lead sampling results can be compared to the protocol outlined in the U.S. Department of Housing and Urban Development's (HUD's)

ARNG12-001-15

Washington Army National Guard Seattle Armory Follow-up IH SAV June 20-21, 2012

Guidelines For The Evaluation And Control Of Lead-Based Paint Hazards In Housing, 2009. HUD currently recommends an exposure limit of 40 µg/ft² for floors. This guideline was established to prevent lead exposure to children in domestic homes, along with females who are pregnant.

The office of Industrial Hygiene Southwest, located in Mather, California has developed a Standard Operating Procedure (SOP) for Armory Cleanup. Essentially, this SOP sets forth a criterion of 200 micrograms per square foot µg/ft² in all areas of the facility. Areas that have levels exceeding 200 µg/ft² should be thoroughly cleaned and employees that may come into contact with those areas should be properly trained in the hazards of lead exposure.

A summary of results from the lead wipe sampling obtained from the armory can be found in Table 4.2.A, below, and complete analytical results can be found in Attachment 4. Floor plans and sample locations can be found in Attachment 2.

| Sample Number | Location | Results (µg/ft ²) |
|------------------|---|----------------------------------|
| ARNG12-001-15-1 | Inside Vault (176th Vert. Det. 1) | BRL |
| ARNG12-001-15-2 | Outside Vault (Alpha 181) | 22 |
| ARNG12-001-15-3 | Inside Vault (181 st HQ Support Bat.) | BRL |
| ARNG12-001-15-4 | Inside Vault (C. Co. Medical) | BRL |
| ARNG12-001-15-5 | Hallway Outside Drill Floor W Door | 15.5 |
| ARNG12-001-15-6 | Drill Floor SW Corner | 129 |
| ARNG12-001-15-7 | Drill Floor NW | BRL |
| ARNG12-001-15-8 | Drill Floor NE | BRL |
| ARNG12-001-15-9 | Drill Floor SE | 13.0 |
| ARNG12-001-15-10 | Drill Floor Center | 13.0 |
| ARNG12-001-15-11 | MP Room Inside Vault | 82.0 |
| ARNG12-001-15-12 | MP Room Outside Vault | BRL |
| ARNG12-001-15-13 | Outside Vault 2 nd Floor East Office Bays | BRL |
| ARNG12-001-15-14 | N Stairwell 2 nd Floor | BRL |
| ARNG12-001-15-15 | Field Blank | BRL |

Table 4.2.A - Lead Dust-Wipe Results

"BRL – Below Reping

All floor areas tested resulted in dust lead levels below the recommended level of 200 µg/ft².

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Follow-up IH SAV June 20-21, 2012

5.0 WRITTEN PROGRAMS & TRAINING

5.1 Written Programs

There were no known written programs maintained at the facility.

5.1.1 Recommendation

A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned. The purpose of the HAZCOM Program is to inform employees about hazardous substances in the workplace, potential harmful effects of these substances and appropriate control measures. The primary tools of this program should include: warning labels, MSDSs and employee training.

5.2 Training

There were no training records maintained at the facility.

5.2.1 Recommendation

Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program.

6.0 LIMITATIONS AND APPROVALS

6.1 Technical Assistance

Contact **Contact** of the Southwest Regional Industrial Hygiene Office, (775) 771-3956 for technical assistance regarding information found in this report or the performed survey.

Contact is directed to the State Safety and Occupational Health Office and/or the Regional Industrial Hygienist, Purnhagen at (253) 912-3181, should any of the operations change, or should the personnel become incapable of following the previous recommendations and subsequent recommendations are needed.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 774 of 980 Washington Army National Guard Seattle Armory

Follow-up IH SAV June 20-21, 2012

6.2 Signatures

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector(s). This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| IH Technician: | | <u>9 - 10 - 12</u> Date |
|---------------------|---|----------------------------|
| | Cole & Associates Training & Consulting, Inc. | |
| Quality Assurance: | | <u>9/10/12</u> Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manage | er: | Date |

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ATTACHMENTS

Attachment 1

Violation Inventory Log

| | | | | ARNG Seattle Armory | bry | A | | | |
|-----------------------------|---|-------------------|-----|---|------------------|---------------------|----------------------|-------------------|--|
| CONTROL NUMBER CLOSED | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE DATE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
| WASEA-062112- 4.1.1 | Hazardous material/chemical inventory list could not be located. | Seattle Armory | 4 | There should be a complete inventory of all flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a facility hazardous materials inventory | | | | | 29 CFR 1910.1200 NGR 385-10, Chapter 6 DODI 6050.5 |
| WASEA-062112- 4.1.2 | MSDS binders were not current and up to date. | Seattle Armory | A | MSDS log/books should be updated, at a minimum, annualty or when new chemicals are added to the inventory | | | | | 29CFR 19.1200, NGR 385-10, DODI 6050.5 NEPA NO 30 |
| WASEA-062112- 6.1.1 | There were no known written programs maintained at the facility for HAZCOM | Seattle Armory | 4 | A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned. | | | | | 29CFR 19,1200, NGR 385-10, DODI 6050,5 |
| WASEA-062112- | WASEA-062112- Lead dust within armory | Armory | n | Upgrade current housekeeping practices and do a more thorough clean-up using the Armory Clean-up SOP. | | | | | Prudent Industrial Hygiene Practices |
| WASEA-062112- 5.2.1 | There were no training records maintained at the facility pertaining to occupational safety & health. | Seattle Armory | 4 | Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. | | | | | 290FR 19.1200, NGR 385-10, DODI 6050.5 |

Industrial Hygiene Southwest

Violation Inventory Log

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

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Page 1 of 1

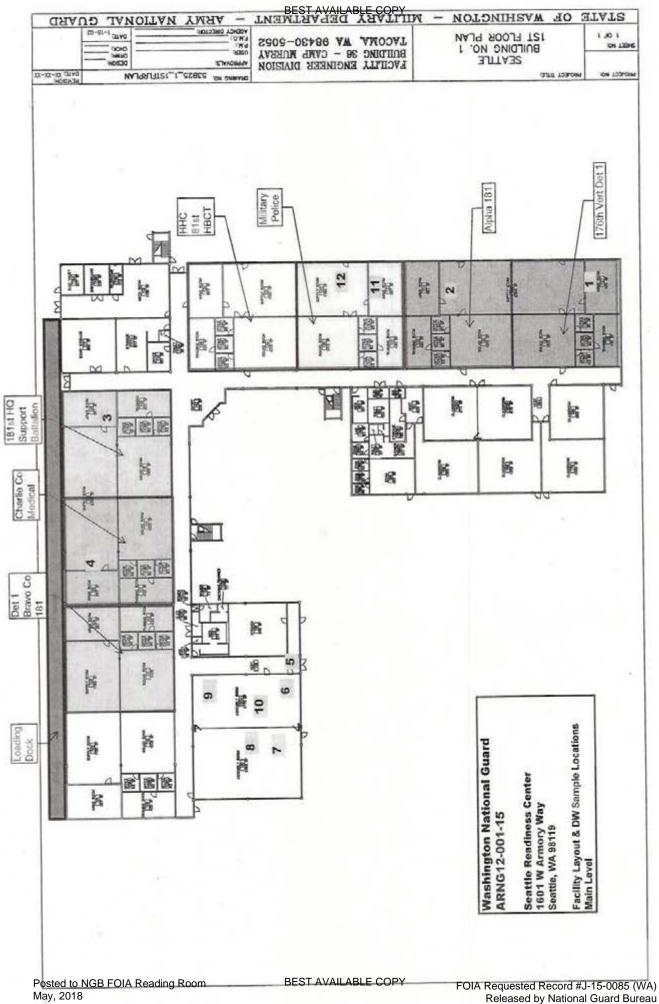
Reference DA FORM 4754 VER: 15 OCT 2009

Attachment 2

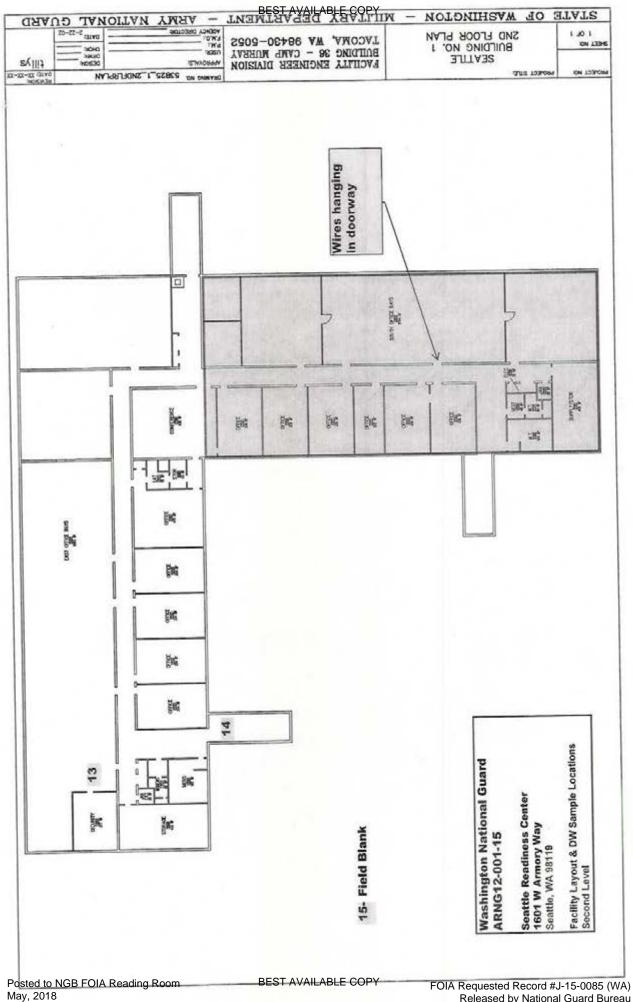
Facility Diagrams

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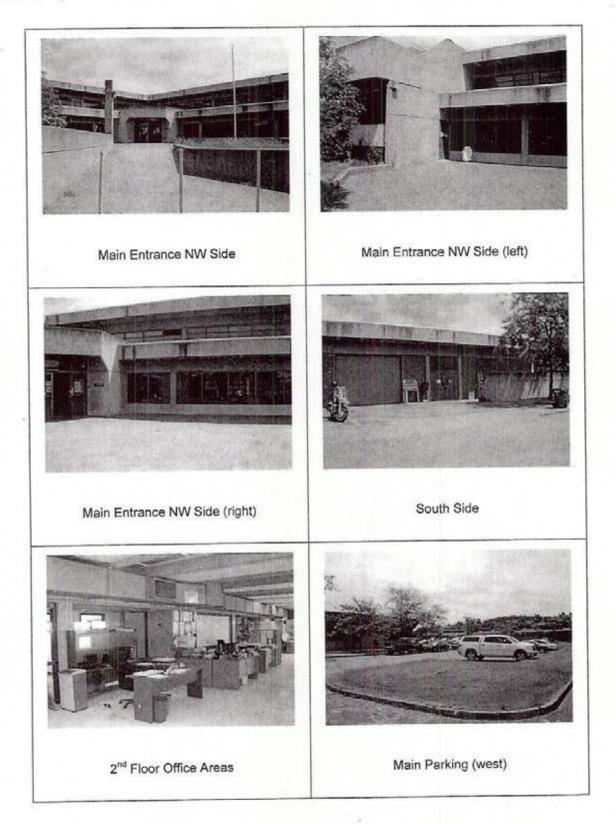
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Attachment 3

Photographs

Seattle Armory Follow-up IH Site Assistance Visit

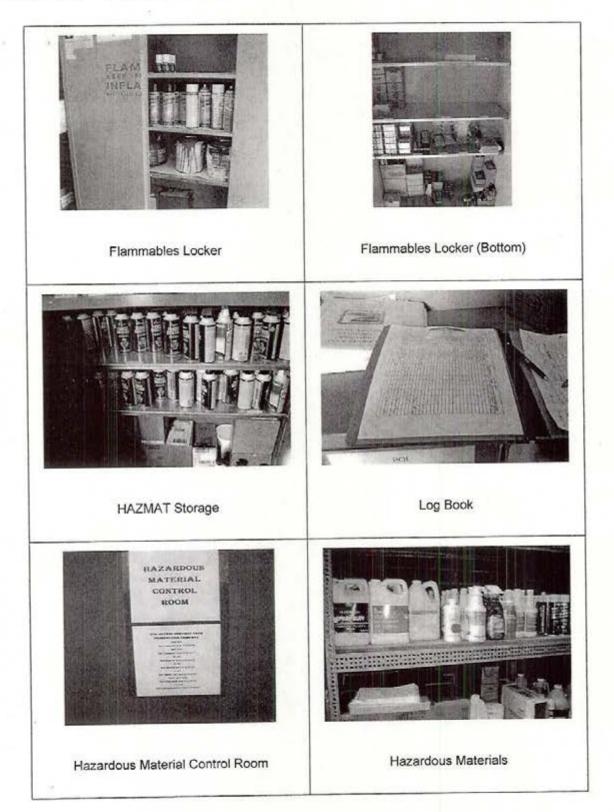
Site Photographs June 20-21, 2012



Attachment 3, Page 1

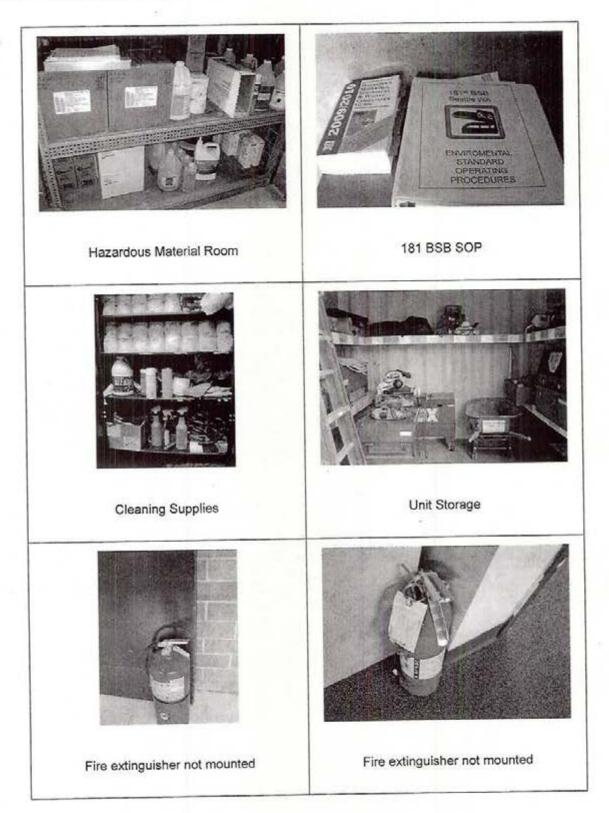
Seattle Armory Follow-up IH Site Assistance Visit

Site Photographs June 20-21, 2012



Attachment 3, Page 2

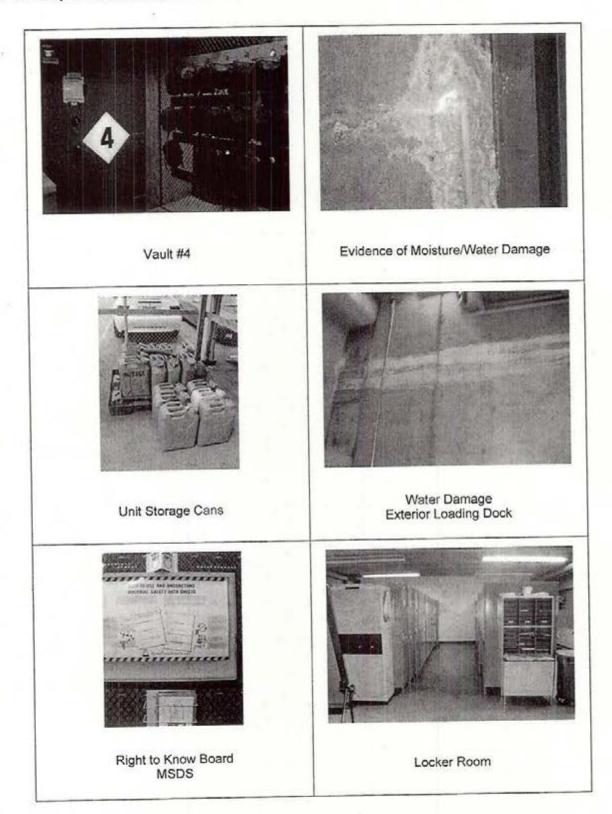
Seattle Armory Follow-up IH Site Assistance Visit Site Photographs June 20-21, 2012



Attachment 3, Page 3

Seattle Armory Follow-up IH Site Assistance Visit

Site Photographs June 20-21, 2012



Attachment 3, Page 4

Attachment 4

Laboratory Analysis Results

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RESERVOIRS ENVIRONMENTAL, INC. 5801 Logan St., Suite 100 Denver CO 80216

TABLE

LEAD BY WIPE SAMPLING

| RES Job Number: | RES 239287-1 |
|-------------------------------|-------------------------------|
| Client: | Cole & Associates |
| Client Project Number / P.O.: | ARNG12-001-15 |
| Client Project Description: | Seattle Armory (WA) |
| Date Samples Received: | July 2, 2012 |
| Analysis Type: | USEPA SW846 3050B / AA (7420) |
| Turnaround: | 3-5 Day |
| Date Samples Analyzed: | July 9, 2012 |
| | |

ANALYSIS:

| Client ID Number | Lab ID N | umber | Sample Area (sq.ft.) | LEAD (µg) | Reporting Limit (µg/ft ²) | LEAD CONCENTRATION (µg/ft ²) |
|---------------------|-------------|--------|----------------------------|--------------|---|--|
| ARNG-001-15-1 | EM | 890141 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-2 | EM | 890142 | 0.50 | 11.0 | 12.5 | 22.0 |
| ARNG-001-15-3 | EM | 890143 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-4 | EM | 890144 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-5 | EM | 890145 | 0.50 | 7.8 | 12.5 | 15.5 |
| ARNG-001-15-6 | EM | 890146 | 0.50 | 64.5 | 12.5 | 129 |
| ARNG-001-15-7 | EM | 890147 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-8 | EM | 890148 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-9 | EM | 890149 | 0.50 | 6.5 | 12.5 | 13.0 |
| ARNG-001-15-10 | EM | 890150 | 0.50 | 6.5 | 12.5 | 13.0 |
| ARNG-001-15-11 | EM | 890151 | 0.50 | 41.0 | 12.5 | 82.0 |
| ARNG-001-15-12 | EM | 890152 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-13 | EM | 890153 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-14 | EM | 890154 | 0.50 | BRL | 12.5 | BRL |
| ARNG-001-15-15 | EM | 890155 | 0.50 | BRL | 12.5 | BRL |

*Calculations Based On A 1 sq.ft. Sample Area Unless Otherwise Noted

* Unless otherwise noted all quality control samples performed within specifications established by the laboratory.

BRL = Below Reporting Limit

P: 303-964-1986 F: 303-477-4275 5801 Logan Street, Suite 100 Denver, CO 80216

Data QA

1-000-RESI-ENV www.reilab.com

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Attachment 5

Additional Supporting Documentation

Seattle Facility Information

June 20-21, 2012

| 1. | Date Prepared: 6/20/2012 Unit Identification Code (UIC) 18 |
|-----|---|
| 2. | ime) of Personnel Conducting IH SAV |
| 3. | Facility Name and Brief Summary of Primary Activities Conducted at Facility: <u>Seattle Armory</u> Admin, Training, Combat, Readiness Training, Recruiting, Family Services |
| 4. | Facility Address: 1601 W Armory Way, Seattle, WA 98119 |
| 5. | Primary Unit Assigned to Facility: 181 st BSB Det |
| 6. | Co-Tenant Units Assigned or Working Within Facility (LIST ALL): <u>Alpha 181, Military Police Unit, HHC</u> 81 st HBCT, 181 st HQ Support Battalion, Charlie Co. Medical Unit, DET 1 Bravo Co. 181 BSB |
| 7. | Square Feet Area of Facility: 2 floors totaling 100,000 DOC: 1974 |
| 8. | Work Schedule: M-F 8-4:30 |
| 9. | Number of Work Bays:N/A (FMS next door) |
| 10. | Equipment Density and Type: N/A a. List Nomenclature Serviced or Maintained at Facility: N/A |
| | b. List Total Number for Each Nomenclature Services or Maintained at Facility: <u>N/A</u> |
| 11. | Total Number of Personnel: up to 40 Full Time Drill Weekend: up to 300 Drill 1xMonth |
| 12. | No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 1 Tech |
| 13. | No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): |
| 14. | Total Number of Personnel Enrolled in the Hearing Conservation Program: NA |
| 15. | Total Number of Personnel Enrolled in the Respiratory Protection Program: NA |
| 16. | Total Number of Personnel Enrolled in the Medical Surveillance Program: NA |
| 17. | Total Number of Personnel Enrolled in the Vision Program: NA |
| 18. | Facility Commander: a. E-mail address. Commercial Telephone Number and Unit Assigned to: |
| 19. | Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: |
| 20. | Facility Telephone Number: (206) 378-6423 Fax: |
| | Posted to NGB FOIA Reading Room May, 2018 BEST AVAILABLE COPY FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 790 of 980 |

Seattle 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 |
|---|---|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | Unit Areas / Off Site Most companies clean weapons offsite |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Yes, 1 st & 2 nd floors |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | Not at this facility No additional samples necessary |
| Is there any peeling paint ? Take bulk sample if able. | Worn/old paint, but not peeling |
| Are there any signs of water damage or mold? | Yes, some evidence of water damage on concrete exterior walls and in the drill floor area No mold noticed |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | 9X9 tiles outside the kitchen in hallway |
| Quality of housekeeping | Average, each unit takes care of their own area |
| HVAC maintenance plan in place? | N/A – State maintains |
| Overall condition of HVAC system | N/A – State maintains |
| Obtained CO2, Temp, RH monitoring | N/A |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | Consolidated Right to Know Center centrally located MSDS are easily accessible in some areas. MSDS not available for all products checked. No chemical list on hand. |
| | Seemed to be current when spot checked |
| HAZMAT storage, Condition of lockers, if outside storage building is used is it | Hazardous Materials Control room is ventilated properly and organized for the most part. |

| ventilated and does it meet OSHA standards. | |
|--|--|
| Fire alarm in working conditionnot usually in place in older armories | In place, operable |
| Fire extinguishers in place and properly identified and mounted | Mostly however a few were not mounted and set on the floor |
| Evidence of monthly fire extinguisher inspections | Yes, current in building/hallways Hard to distinguish in locked unit areas |
| Annual fire extinguisher inspections tags current | Yes, mostly |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | At FMS next door None in this building |
| 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) | Training programs are centrally located electronically and not kept on site. (per unit) |
| Any Photo labs | No |
| Any hazardous noise sources | No noise hazards, possibly in 176 Vert. DET |
| Light levels checked throughout building | N/A |
| Breaker panels properly labeled with no exposed wiring | Yes, All that were visible |
| Check building occupancy | Military-40+ full time and 300-500 IDT |
| How many military personnel, how many civilian personnel What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | Administrative, combat, readiness training, recruiting |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | In the past yes, however now there are 9 units so now only occasionally. |
| Obtain two lead air samples | Upon request only |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | N/A |
|--|---|
| 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. | Yes, There are wires hanging in the doorway creating a safety hazard in the second floor classroom Fire extinguishers aren't wall mounted and inspections are not all current. Copies of records of all asbestos inspection and abatement activity conducted at this facility. |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Yes |
| Name of Armory, POC, phone #, address and organizations in Armory | Seattle Armory 1601 W Armory Way Seattle, WA 98119 ARNG only |
| (Add Checklist to Report) | (Add Checklist to Report) |

Attachment 6

Recommendations

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 794 of 980

COLE & ASSOCIATES TRAINING & CONSULTING, INC.

ENGINEERING, HEALTH, SAFETY, AND ENVIRONMENTAL

20-21 June 2012

US Army National Guard Bureau Industrial Hygiene Southwest 10510 Superfortress Ave, Suite C Mather, CA, 95655

Subject: ARNG12-001-15 Seattle Armory Recommendations

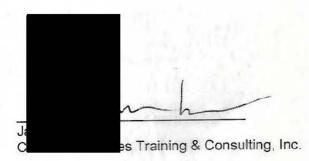
To Whom It May Concern:

Hazardous Materials / MSDS

- 1. There should be a complete inventory of all flammable storage cabinets and flammable storage buildings/rooms. Dispose materials that are old or no longer required, obtain MSDS files for the remaining stock, and update/establish a facility hazardous materials inventory. (4.1.1)
- 2. MSDS log/books should be updated, at a minimum, annually or when new chemicals are added to the inventory .(4.1.2)

Written Programs and Training

- 1. A written Hazard Communication (HAZCOM) program should be implemented facility-wide to include all units assigned. (5.1.1)
- 2. Training records should be maintained at the facility for all personnel enrolled in the recommended HAZCOM program. (5.2.1)



Cole & Associates Training & Consulting, Inc. + 18062 72nd Avenue South, Kent, WA 98032 (425) 793-5505 + (425) 793-5552 Fax + 1-877-455-BEAR + www.ctcbear.com

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ARMY NATIONAL GUARD

Guam + Hawaii + California + Oregon + Washington + Nevada + Arirona + Idaho + Utah + Wyoming + Montana + New Mexico + Nebraska

Industrial Hygiene Site Assistance Visit

Toppenish Armory 326 S. Division Street Toppenish, WA 98948

10510 Superfortress Avenue, Suite C, Mather, CA 95655

(916) 854-1491

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 796 of 980



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

ARNG-CSG-P

31 JUL 2012

MEMORANDUM FOR One Militia Drive, Bldg 1, Camp Murray, WA 98430-5016

The Adjutant General of Washington,

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Bellingham Armory at 326 S. Division Street, Toppenish, WA on 24 JUL 2012.

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 Armory had the following high risk level findings:
 - 1. There were no Risk Assessment Code(s) (RAC 1 or RAC 2) identified during this Industrial Hygiene Survey.
- 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.

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, or RAC 2 hazard(s) were identified at this facility.

ARNG-CSG-P

SUBJECT: Executive Summary for the Industrial Hygiene Survey of Toppenish Armory on 24 JUL 2012.

| 4. The technical point of contact is information, contact the Occupational Safety & OH | at (775) 771-3956. For follow up & Health Office 3) 912-3832. |
|--|---|
| | |
| | |
| | Chief, Industrial Hygiene |
| CEMO 2460 Fairvier | Carson City, NV 89701 w Dr, Carson City, NV 89701 y Aviation Dr, Reno, NV 89506 |
| CF w/end OHN, (Control of the pairview Dr. Control of the | arson City, NV 89701 00 Army Aviation Dr, Reno, NV 89506 |



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

23 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray Tacoma, WA 98430

FOR Commander, Toppenish Armory, 326 S. Division Street, Toppenish, WA 98948

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Toppenish Armory, 326 S. Division Street, Toppenish, WA 98948

<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 Toppenish Armory, Toppenish, WA on 24 JUL 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. This armory was closed up and apparently sold to the state. Contractor was unable to get into facility to do follow-up lead wipe samples. A <u>follow-up SAV should be attempted</u> to verify that this



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ARNG-CSG-IHSW

23 August 2012

MEMORANDUM THRU Washington Army National Guard, Deputy State Surgeon (DSS), MED COM Bldg 34, Camp Murray Tacoma, WA 98430

FOR Commander, Toppenish Armory, 326 S. Division Street, Toppenish, WA 98948

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Toppenish Armory, 326 S. Division Street, Toppenish, WA 98948

1. References. See survey report.

2. General.

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ARNG-CSG-IHSW

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Toppenish Armory, 326 S. Division Street, Toppenish, WA 98948

facility is eligible for occupation by the purchasing agency and below PEL for lead dust.

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.

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 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.

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for the Toppenish Armory, 326 S. Division Street, Toppenish, WA 98948

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 Washington 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

t (775) 771-3956 or via email at

NGB, IHSW, CIV Industrial Hygiene

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

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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.
- 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. 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)
 - c. Used regularly by soldiers or outside agencies/personnel. (Cleaned Regularly - -at least Weekly)

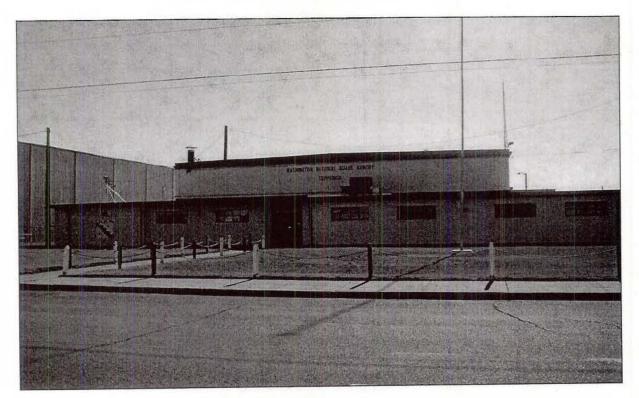
NOTE: Armories with adjoining Indoor Firing Ranges (IFR) should be cleaned more than weekly, again depending on use of Armory and IFR.

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 Services SITE ASSISTANCE VISIT



Army National Guard Toppenish Armory 326 S Division St Toppenish, WA 98948

Prepared for:

Program Manager National Guard Bureau Industrial Hygiene Southwest

Prepared by:

Cole & Associates Training & Consulting, Inc. 18062 72nd Avenue South Kent, Washington 98032

Project Number: ARNG12-001-16

Cole & Associates

Page 1

ARNG12-001-16

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 808 of 980 Washington Army National Guard Toppenish Armory

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ATTACHMENTS

| Attachment 1 | - | Violation Inventory Log |
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| Attachment 2 | _ | Photographs |
| Attachment 3 | - | Additional Supporting Documentation |

Washington Army National Guard Toppenish Armory Follow up IH SAV July 24th, 2012

1.0 EXECUTIVE SUMMARY

On July 24th, 2012, And An Industrial Hygienist with Cole & Associates Training & Consulting, Inc. conducted a Policy-up Industrial Hygiene Site Assistance Visit (SAV) at the Army National Guard's Toppenish Armory located 326 S Division St, in Toppenish, Washington.

The survey was conducted at the direction of the National Guard Bureau, Southwest Regional Industrial Hygiene Office in Mather, California and included a review of previous SAV reports, interviews, and property and parcel searches with the Yakima County Assessor's office.

The original purpose of this IH SAV was to re-evaluate the lead-contaminated areas inside the armory and to make any recommendations for additional corrective actions or follow-up work to be completed. During attempts to contact a POC for the facility, it was discovered that the facility had apparently changed hands and was assumed to be sold. Confirmation of this was necessary as there were no records available and it was unknown if the facility had been properly cleaned and lead free prior to re-occupancy..

A walk through of the property was conducted and photos were taken to document the findings.

Upon arriving at the armory, the building was found to be locked and unoccupied by former and/or new tenants. There were many boxes of files visible through the windows although it is unclear who they belonged to.

A search of the Yakima County records confirmed the sale of the armory (parcel # 201010-21009) to Yakima Nation Land Enterprises for \$500,000 on February 15th, 2010. The county assessor's office reported this sale to include three properties altogether. The second property (parcel # 201010-21008) is located at 202 S 3rd St which is adjacent to the armory and the other is unknown.

The photos associated with this section are included in Attachment 1. Various details concerning the sale are included in this report and in Attachment 3.

2.0 BACKGROUND

The Toppenish armory is a one story concrete block type structure built in 1975. The total square footage for the building is approximately 10,000 square feet. Past reports and floor plans identify office areas, a large drill floor, supply areas, male and female restrooms, one weapons vault, a boiler room, and a kitchen. On the exterior, there are two storage sheds and a maintenance building on the east side of the property. There are no records of an indoor firing range (IFR) at this facility.

Reports show the armory was used by personnel for private parties and leased to civilians several times a year for various activities.

2.1 Follow-up SAV Objectives

The purpose of a typical follow-up SAV would be to re-evaluate potential high lead levels identified from prior SAV results. This would also include interviews with armory personnel

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 810 of 980

Follow up IH SAV July 24th, 2012

regarding industrial hygiene issues as well as any changes in operations in the work area that might affect the workers' health & safety. Due to the circumstances, interviews with Army personnel could not take place.

2.2 Recurring Observations

Information is typically gathered from previous reports as to the need for follow up investigations. The most recent report available was dated March 2004.

2.2.1 Lead Dust Hazards

Past reports and analytical results indicate high lead dust levels in several areas although none exceeded the recommended level of 200 μ g/ft² which is the current analytical criterion.

3.0 SURVEY PROCEDURES

Lead wipe samples are typically collected from dusty horizontal floor surfaces throughout the facility, however, due to the lack of access to the structure, the survey was restricted to visual observation from the outside and information from various sources.

4.0 SURVEY OBSERVATIONS & FINDINGS

The following survey observations and findings are the result of direct observations by Cole & Associates personnel.

4.1 Lead Dust-Wipe Results

Lead wipe sampling was not conducted as the Armory was sold.

4.2 Indoor Firing Range

There are no records of an indoor firing range (IFR).

5.0 LIMITATIONS AND APPROVALS

5.1 Technical Assistance

Contact of the Southwest Regional Industrial Hygiene Office at (916) 804-1707 for technical assistance regarding information found in this report or the performed survey.

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.

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ARNG12-001-5&6

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 811 of 980 Washington Army National Guard **Toppenish Armory**

5.2 Signatures

Follow up IH SAV July 24th, 2012

Cole & Associates Training & Consulting, Inc. warrants that the findings contained herein have been assessed and reported in general accordance with accepted professional practices as applied by similar industrial hygiene professionals in the industry at the time of this report preparation.

This report is based upon conditions observed at the facility and information made available to the inspector. This report does not intend to identify all environmental hazards, nor is it intended to indicate that other hazards do not exist at the premises. There is a distinct possibility that conditions may exist that could not be identified within the scope of the survey or that were not apparent during the site visit.

| Industrial Hygienist: | | 8-15-12 Date |
|-----------------------|---|-----------------|
| | Cole & Associates Training & Consulting, Inc. | Date |
| Quality Assurance: | | 8/15/12 Date |
| | Cole & Associates Training & Consulting, Inc. | |
| IHSW Program Manager: | | Date |

NGB- Industrial Hygiene Southwest

May, 2018

Posted to NGB FOIA Reading Room

ARNG12-001-5&6

| | | | | AKNG Toppenish Armory | rmory | | | | |
|--|---|--------|------|--|----------|---------------------|----------------------|-------------------|--|
| CONTROL NUMBER | HAZARD DESCRIPTION | SITE | RAC | CORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
| Toppenish WA- 072412-Exec. Summary | Toppenish WA- 072412-Exec. this Industrial Hygiene Site Summary Assistant Visit | Armory | None | None Housekeeping Practices | | | | | Prudent Industrial Hygiene Practices, NGB, OSHA Regulations |

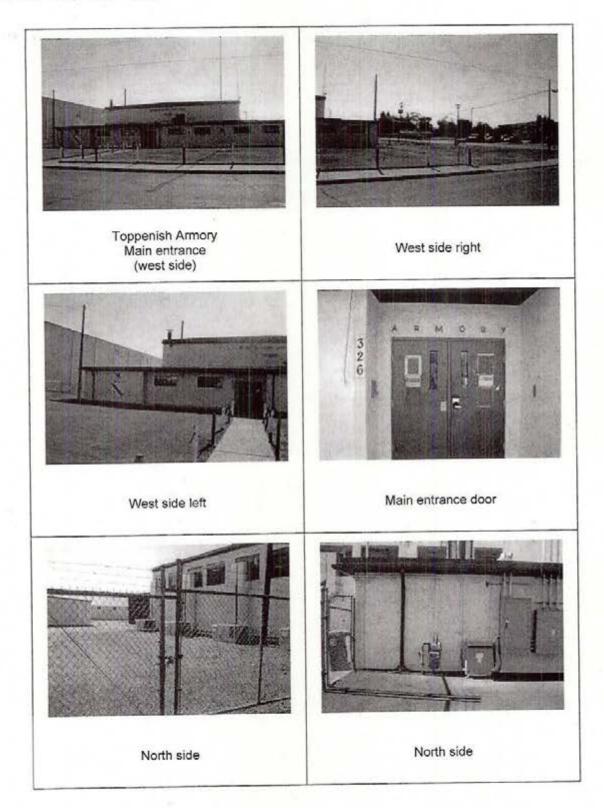
Industrial Hygiene Southwest

Violation Inventory Log

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

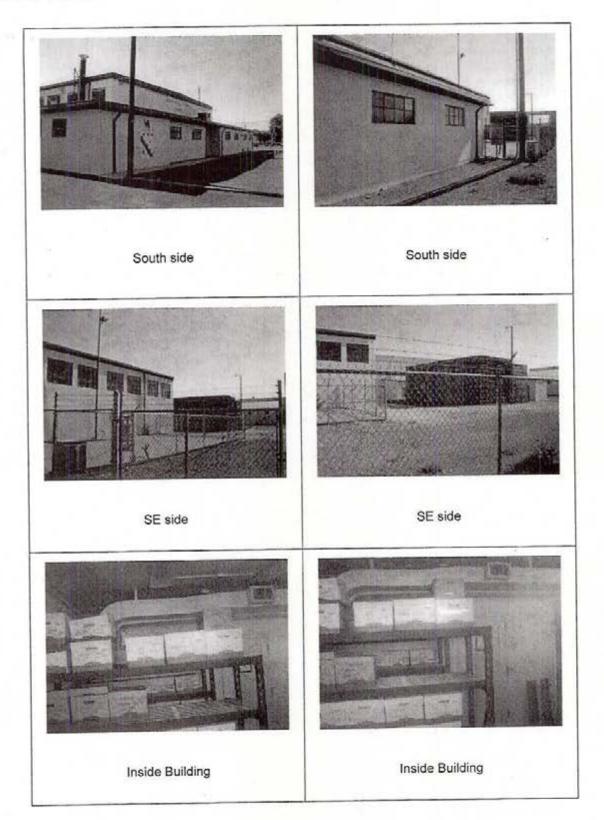
FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 813 of 980

Toppenish Armory / IFR IH Site Assistance Visit Site Photographs July 24, 2012



Attachment 1, Page 1

Toppenish Armory / IFR IH Site Assistance Visit Site Photographs July 24, 2012



Attachment 1, Page 2

Attachment 3

Additional Supporting Documentation

Theme: Default Y Home Parcel Search Sales > Other Searches > Departments ► Forms FAQs) SITE NEWS While this information is intended to be accurate, any manifest errors are unintentional and subject to correction. Please feel free to ect them as soon as possible. To contact us call either (509) 574-1100 or 27 Jan 2012:: News Header The New Assessor Annual Report Is available. contact us about any errors you (800) 572-7354, or e-mail us Other Property Data Sales Segregations Taxes Values Parcel Details Detailed Information for Land Record #1 Value Method: SO-FEET Land Flag: C Flood Plain: NO Soil Class: Lot Shape: RECTANGLE Lots: Squarefeet: 40,711 TATULA Calculate Current Use: NO Topography: 2 LEVEL Land View: 2 NO VIEW Acre(s): 0.930 Water Source: PUBLIC COL COL Landscaping: NONE Sewer Source: PUBLIC REULE 127 #55 201015-21000 IMPORTANT LINKS Detailed Information for Commercial Yakima County GIS Map Section #101 Year Built: 1965 Foundation: YES Building Type: ARMORY Construction: MASONRY-WALL Ground Floor Area: 9475 Quality: AVERAGE Heat/Cool Type: FORCED-AIR Condition: AVERAGE Stories: 1.0 Exterior Wall Type: BLOCK CONTACTING US Number of Floors Use Code **Base Floor Area Commercial Group** 9,475 1.00 Armory 1

While this information is intended to be accurate, any manifest errors are unintentional and subject to correction. Please feel free to contact us about will try to correct them as soon as possible. To contact us call either (509) 574-1100 or (800) 572-7354, or e-mail us

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Parcel Pictures

County Treasurer Tax Information Yakima County Home Update Mailing w/Assessor

Office Hours 8:00am to 4:00pm M-F Mailing Address 128 N 2nd St Room 112 Yakima, WA 98901 Phona Numbers(9:00am to 4:30pm) (509)574-1100 (800)572-7354 (toll free in WA)

http://ves.co.vakima.wa.us/Assessor/parcel_details.aspx?id=74451 Posted to NGB FOIA Reading Room BEST AVAILABLE COPY May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 817 of 980

| | Ho | me Parcel Search | n Sales ► Oth | er Searches 🕨 🛙 | Departments Form | s FAQs |
|-------------------------------------|-------------------------------------|--|---|--|-----------------------|-----------------|
| | Situs Address | Use Code | TCA Size | the second s | | |
| 201010-21009 | 326 S Division St | 67 Service - Govern | mental 480 0.93 | C127 | | |
| Owner(s) | • | ~ | | | | |
| Yakama Nation L | and Enterprise | | | | | |
| | gal Description | | | | | |
| S 200 FT OF W 4 STR. & N'LY OF 3 | 40 FT OF TH PT O BRDSTR. EXTD EX | FNE1/4 NW1/4 LY W W 40 FT FOR STR & | LY OF N.P.RY R-W EXE 200 FT | &S'LY OF 2ND | | |
| Detailed Inform | nation for Land | Record #1 | | | | |
| | Land Flag: C | | Flood Pl | | Value Method | |
| | Soil Class: | | 100000000000000000000000000000000000000 | pe: RECTANGLE | Lots | 140.007402 |
| Calculate Cu | rrent Use: NO | | | ohy: LEVEL | Squarefeet | |
| Wat | er Source: PUBLI | с | Land View: NO VIEW Landscaping: NONE | | Acre(s) | 11 0.930 |
| Sew | er Source: PUBLI | c | Landscap | ing: NONE | | |
| Detailed Infor | mation for Comm | nercial | | | | |
| Bull | ding Type: ARMO | RY | Year Bu | | Foundat | tion: YES |
| | | uality: AVERAGE Ground | | ea: 9475 | Construct | tion: MASONRY- |
| | Condition: AVER | AGE | Stori | es: 1.0 | Heat/Cool T | ype: FORCED-AIR |
| Exterior | Wall Type: BLOC | κ | 04 | 11 A. | | |
| Commercia | Group | Commercial Group | Use Code | Base Floor Are | a Number of Fl | oors |
| 101 | 1 | 1 | Armory | 9,475 | 1 1.00 | |
| Utility Inform Gas: | | utility is available a lectric: Yes | t parcel bounda Water: | ry) Public Sewer | /Septic: Public | |
| Site Informat | | oning: Sp | Street Type: | Two-Way Street | Finish: Paved/Asphi | t |
| Property Type Traffic: | | sump. | Curbs: | Yes Locati | on: Road-Frntag | e |
| it differ | | | Sales Inform | | and the second second | Portion(Y/N |
| Excise # | | or Name | Sale Date | Sale Price | Document Type | No |
| 413570 | Washington | State - Military | 02/15/2010 | \$500,000 | Quit Claim Deed | inv |

There are no segregations related to this parcel in the database.

Tax Breakdown Information*

*Please Note: These are not guaranteed tax amounts. They may have rounding errors and are only an indication of what taxes would be if this parcel were taxed at current values for this Tax Year. In addition no assessments will be included on this list (irrigation, road Improvement etc.) -

| Tax year 201 | | E Mary | |
|---|--|---|--|
| Regular Rate | Regular Tax | Excess Rate | Excess Tax |
| and a second s | \$45.13 | .00000000 | \$0.00 |
| the second se | the second s | 00000000 | \$0.00 |
| and the second se | and the second sec | and the second | \$9.49 |
| .00000000 | the second se | the second se | \$0.00 |
| 2.39830433 | \$482.30 | .00000000 | |
| 2,74712075 | \$552.45 | .00000000 | \$0.00 |
| | \$0.00 | 1.05213706 | \$211.58 |
| in the second | | 2 08587227 | \$419.47 |
| .00000000 | the second se | and the second se | \$0.00 |
| 1.53714238 | and the second se | the second se | |
| .47241404 | \$95.00 | .000000000 | \$0.00 |
| | Regular Rate .22442381 .08955485 .00000000 2.39830433 2.74712075 .00000000 .00000000 .00000000 .00000000 .00000000 | .22442381 \$45.13 .08955485 \$18.01 .00000000 \$0.00 2.39830433 \$482.30 2.74712075 \$552.45 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 | Regular Rate Regular Tax Excess Rate .22442381 \$45.13 .00000000 .08955485 \$18.01 .00000000 .00000000 \$0.00 .04717684 .239830433 \$482.30 .00000000 .2.74712075 \$552.45 .00000000 .00000000 \$0.00 1.05213706 .00000000 \$0.00 2.08587227 .1.53714238 \$309.12 .0000000 |

| | Tax Year 201 | 11 | | | |
|------------|--------------|-------------|-------------|------------|--|
| | Regular Rate | Regular Tax | Excess Rate | Excess Tax | |
| District | | \$45.67 | .00000000 | \$0.0 | |
| County EMS | .21481536 | \$10.01 | | | |

Parcel Details for Parcel Number 201950 21009 COPY

| .08546675 | \$18.17 | .00000000 | \$0.00 |
|---|---|---|--|
| .00000000 | \$0.00 | .04893773 | \$10,40 |
| 2.20865145 | \$469.56 | .00000000 | \$0.00 |
| 2,75779102 | \$586.31 | .00000000 | \$0.00 |
| .00000000 | \$0.00 | 1.08415744 | \$230.49 |
| .00000000 | \$0.00 | 2.07112883 | \$440.32 |
| the second se | \$312.81 | .00000000 | \$0,00 |
| .45293972 | \$96.29 | .00000000 | \$0.00 |
| | .00000000 2.20865145 2.75779102 .00000000 .00000000 1.47133137 | .00000000 \$0.00 2.20865145 \$469.56 2.75779102 \$586.31 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 .00000000 \$0.00 .0147133137 \$312.81 | .0034073 .0034073 .00000000 \$0.00 .04893773 2.20865145 \$469.56 .00000000 2.75779102 \$586.31 .00000000 .00000000 \$0.00 1.08415744 .00000000 \$0.00 2.07112883 1.47133137 \$312.81 .00000000 |

| | | Value bieaku | own amornia | | | | |
|-----------------------|-----------|--------------|-------------|-----------|-----------|-----------|----------|
| Value Type | 2012 | 2011 | 2010 | 2009 | 2008 | 2007 | 2006 |
| Taxable Value Regular | \$201,100 | \$212,600 | \$180,831 | \$0 | \$0 | \$0 | \$0 |
| Taxable Value Excess | \$201,100 | \$212,600 | \$180,831 | \$0 | \$0 | \$0 | \$0 |
| Market Land | \$40,700 | \$40,700 | \$40,100 | \$40,100 | \$40,100 | \$40,100 | \$30,050 |
| | \$160,400 | \$171,900 | \$166,800 | \$204,900 | \$204,900 | \$213,600 | \$70,300 |
| Market Improvement | \$200,100 | 4112/100 | Terreterel | | | | |

Value Preskdown Information

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Home Parcel Search Sales > Other Searches > Departments > Formsher A Default X

SITE NEWS

27 Jan 2012:: News Header The New Assessor Annual Report is available.

IMPORTANT LINKS

Yakima County GIS Map County Treasurer Tax Information Yakima County Home Update Mailing w/Assessor

CONTACTING US

Office Hours 8:00am to 4:00pm M-F Mailing Address



Grantor: Washington State - Military **Excise Number:** 413570 \$500,000 Sale Date: 02/15/2010 Sale Price: Transfer Type: Quit Claim Deed Portion: Parcel Number

201010-21008 (View Map) 201010-21009 (View Map) No

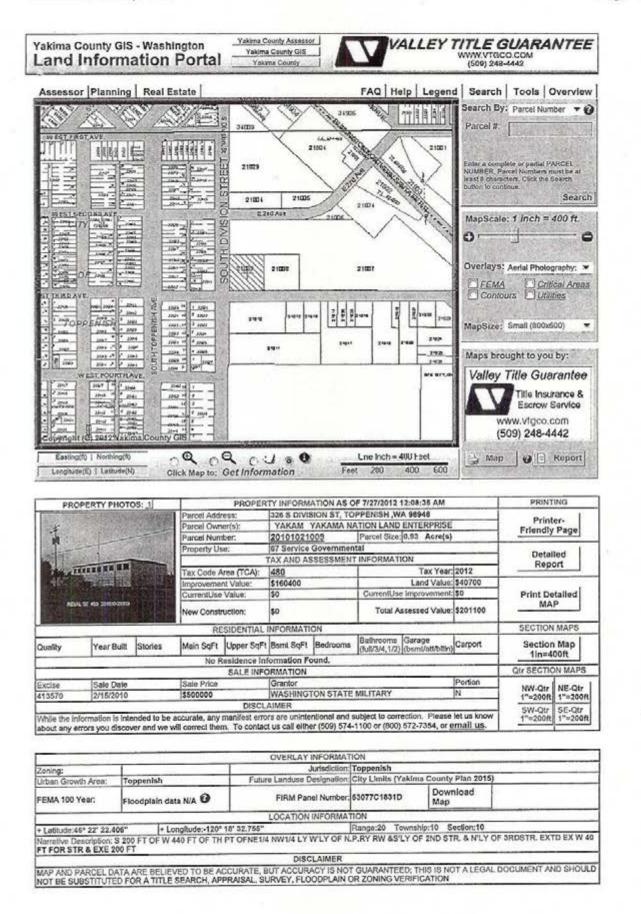
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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 820 of 980



http://www.vakimap.com/servlet/com_esri esrimap.Esrimap?name=YakGIS... 7/30/2012 Posted to NGB FOIA Reading Room May, 2018 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 821 of 980



ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam + Hawsii + California + Oregon + Washington + Nevada + Arizona + Idahu + Usah + Wyomung + Montana + New Mexico + Nebrarka

Industrial Hygiene Site Assistance Visit

Walla Walla Armory 113 S Colville Street Walla Walla, WA 99362

66 Dec 2012

20.000 Army Aviation Drive, Reno, NV 89506 (775) 771-3956 - 10515 Georgetown Drive, Rancho Cordova, CA 95670 (916) 804-1707

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

20,000 Army Aviation Drive, Reno, NV 89506 (775) 972-2765 - 10515 Georgetown Drive, Rancho Cordova, CA 95670 (916) 804-1707

ARNG-CSG-P

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Walla Walla Armory 113 S. Colville St., Walla Walla, WA on 06 DEC 2012.

of weapons cleaning should have areas cleaned with SOP attached to this report. (para. 4.1) (RAC 3)

- Acquire the <u>asbestos management</u> plan for this armory or if not accomplished have certified WA inspectors access the armory and have an Operations & Maintenance Plan in place to protect the workers and building personnel. (para. 4.4) (RAC 3)
- Install <u>covers</u> on all junction and outlet boxes to help prevent a shock hazard. (para. 4.11.4) (RAC 3)
- Consult with a <u>lead based paint</u> certified contractor to have lead based paint areas mitigated or encapsulated. (para. 4.2) (RAC 4)
- e. Inspect all <u>fire extinguishers</u> monthly and document inspection on extinguishers tag. (para. 4.11.2) (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.

 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).

ARNG-CSG-P

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (SAV) for the Walla Walla Armory 113 S. Colville St., Walla Walla, WA on 06 DEC 2012.

a. Eccumenting 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>Washington</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



6

NGB, IHSW, CIV Industrial Hygiene

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 825 of 980 Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Walla Walla Armory - Walla Walla, Washington

1910.1001 & 29 CFR 1926.1101 Clause 5(a)(1) & Industrial Hygiene Prudent Industrial Best Management Prudent Industrial Hygiene Practice: Hygiene Practice. 1910.1025 (h)(1) ANSI Z4.1-1986 REFERENCES General Duty & Prudent 29 CFR Practice. 29 CFR Practice. CORRECTED DATE Estimated Cost(s) OIC/NCOIC ACTION SUSPENSE DATE water damage and if repairs are certified inspector to inspect the identified in the building, then an **Operations & Maintenance Plan** housekeeping practices need to based paint areas removed and SAV using the Armony Clean-up necessary. Perform repairs as facility for asbestos containing facility, consult with WA state State certified lead abatement prevent migration of lead into Determine the source of the If an Asbestos Management communicated to personnel Plan is not available for this material (ACM). If ACM is these areas identified in this Clean horizontal surfaces in be implemented in order to Consult with a Washington CCORRECTIVE ACTIONS contractor to have the lead other areas of the facility. working at this facility. must be written and SOP included. Better (Abatement Plan) stabilized. needed. RAC 3 e 4 4 (Basement) Room 012 (Room 05) FR, Vault 1 (Room 05). Room 20) Converted Basement at stairs Armony Vault 1 Boiler Room SITE Deteriorating lead based paint. No Asbestos Management Water damage to ceiling HAZARD DESCRIPTION Lead levels exceeding Plan available standards 2062012-4.4 2062012-4.2 12062012-4.3 12062012-4.1 WAWWA-WAWWA-WAWWA-WAWWA-CONTROL NUMBER CLOSED

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

Walla Walla Armory - Walla Walla, Washington

| CONTROL | HAZARD DESCRIPTION | SITE | RAC | CCORRECTIVE ACTIONS (Abatement Plan) | SUSPENSE | ACTION OIC/NCOIC | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|---------------------------|--|---------|-----|--|----------|---------------------|----------------------|-------------------|--|
| WAWWA- 12062012-4.6 | Insufficient illumination | Offices | 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 |
| WAWWA- 12062012-4.6 | Temperatures below ASHRAE recommendations | Amory | 4 | Increase temperature to meet ASHRAE recommendations. | | | | | ASHRAE Standard 55-1992 |
| WAWWA- 12062012-4.7 | No hazardous materials inventory or MSDS sheets available. | Armory | 4 | Prepare a hazardous materials inventory. Maintain corresponding MSDSs with the inventory, available to all employees. | | | | | 29CFR 1910.1200 (e)(4)(b), NGR 385-10 Appendix G-7, Ch. 6-4 (a), & 29 CFR 1910.1200(h)(2) |
| WAWWA- 12062012-4.8 | No training records or safety records were available for review. | Armory | 4 | Develop and implement a HAZCOM program. Provide and document training to all employees, annually or as new hazardous materials are introduced. Records of training are to be maintained and available for review on site. | | | | | 29 CFR 1910.1200 (Appendix E) (4)(c); 1910.1200 (e)and NGR 385- 10, Ch6-4a, 6- 10, Ch6-4a, 6- 10, Ch6-4a, 6- 10, 14-2 |
| WAWWA- 12062012-4.11.2 | Overdue monthly inspections of fire extinguishers | Armory | 6 | Inspect all fire extinguishers monthly and document inspection date, and inspector's signature on the inspection tag | | | | | 29 CFR 1910.157 (e)(2) |

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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:

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

- 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.

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- 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.

INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

WALLA WALLA ARMORY 113 S. COLVILLE STREET WALLA WALLA, WA 99362

December 6, 2012

Prepared for: Industrial Hygiene Southwest 10510 Superfortress Avenue, Suite C Mather, California 95655

> Prepared by: NES, Inc. 1141 Sibley Street Folsom, CA. 95630

NES Job Number: 013.IH1374.92



Environmental Health and Safety Specialist

Reviewed by:

D

Principal-In-Charge

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NES, Inc. NES Job Number: 013.1111374.92

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IHSAV Walla Walla Armory Walla Walla, Washington

May, 2018

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EXECUTIVE SUMMARY

On December 6, 2012, a privinonmental Health and Safety Specialist, and . Industrial Hygiene Field Technician with NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Walla Walla Armory located at 113 S. Colville Street in Walla Walla, Washington. The Walla Walla Armory is under the direction of the generation of the primary point of contact for information gathered during this survey was may be reached by phone at 509-225-2291.

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: went above and beyond expectations to help *NES* complete the IHSAV. was attentive and informative during the IHSAV.

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1.0 INTRODUCTION

On December 6, 2012 Environmental Health and Safety Specialist, and dustrial Hygiene Field Technician with NES, Inc. (*NES*) conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the Walla Walla Armory located at 113 S. Colville Street in Walla Walla, Washington. The Walla Walla Armory is under the direction of may be reached by email at phone at 509-225-2291. The primary point of contact for information gathered during this survey was

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.

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2.0 PROCESS DESCRIPTION

The Walla Walla Armory has two fulltime employees and twelve M-day soldiers. The primary unit assigned to this facility is Detachment 1 E Company 181 BSB. Regular facility operating hours are Monday through Friday, 0800 to 1630. The Armory is primarily used for recruiting and inactive duty training. At the time of the IHSAV there were no civilian employees.

The Walla Walla Armory is a three story building which was built in approximately 1920. The total building size is 52,500 square feet. This facility contains the following: offices; classrooms; a converted indoor firing range (IFR); two vaults; storage rooms; a drill hall; and a kitchen. Indicated weapons are not cleaned at this facility. The facility is rented out to civilians approximately once every other month for parties and balls.

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3.0 METHODS

3.1 Lead Sampling

Metals wipe samples were collected on horizontal work and floor surfaces in various locations throughout the Walla Walla 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. All samples, if collected, were submitted to ALS Laboratory Group (ALS) in Salt Lake City, Utah. ALS analyzed 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 for 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 done. Suspect asbestos containing materials (ACMs) if present, are noted in this report.

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, relative humidity and carbon monoxide (CO) were measured using a Gray Wolf IAQ meter, model IQ410. The unit was calibrated before use

IHSAV Walla Walla Armory Walla Walla, Washington Page 4 of 15

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 838 of 980 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 (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 Walla Walla Armory. The instrument used for the illumination survey was a Konica Minolta Light Meter, Model TL-1. Measurements taken were obtained at typical working locations such as desks, computers, workstations and general working areas. To provide information on the overall lighting conditions in the remainder of the Armory, measurements were taken from the surfaces of typical work locations and at waist level from selected locations.

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.

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3.9 Ventilation Survey

Air velocity and flow measurements were not measured because there were no exhaust hoods to be evaluated at the facility.

3.10 Sound-Level Measurements

Sound-level measurements were not conducted because no hazardous noise sources were identified during 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) testing, 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.

| Equipment Type | Model Number | Serial Number | Calibration Date |
|----------------------------|--------------|---------------|------------------|
| Konica Minolta Light Meter | TL-1 | 279029 | 05/2012 |
| Gray Wolf IAQ Meter | IQ-410 | 4G2BDW3381NWP | 05/2012 |

Please see Appendix H for a complete inventory of calibration certificates for equipment that was 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;

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- 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.

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4.0 FINDINGS AND RECOMMENDATIONS

4.1 Lead Sampling

Wipe samples for lead dust were collected from horizontal surfaces in selected representative areas of the Walla Walla 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.

Fifteen Ghost WipeTM lead samples were collected during the time of the IHSAV. The first five samples were collected from the center and four corners of the drill floor. The analytical results indicated acceptable concentrations of lead dust on the drill floor.

Additional lead wipe samples were collected from the following areas: the kitchen; entrance hall; converted IFR; the vaults; furnace room; locker room; and the basement.

The analytical results are provided in the table below.

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| Sample Number | Sample Area | Sample Location | Results (µg/ft ²) | ARNG/HUD Standard |
|----------------------|---------------|---|----------------------------------|-----------------------------------|
| 120612-WWA-01 | Drill Floor | Southwest corner of drill floor, floor area sample | < 2.5 | $\leq 40 \ \mu g/ft^2$ |
| 120612-WWA-02 | Drill Floor | Southeast corner of drill floor, floor area sample | 4.6 | \leq 40 μ g/ft ² |
| 120612-WWA-03 | Drill Floor | Center, middle of drill floor, floor area sample | 4.0 | \leq 40 µg/ft ² |
| 120612-WWA-04 | Drill Floor | Northwest corner of drill floor, floor area sample | 2.6 | \leq 40 µg/ft ² |
| 120612-WWA-05 | Drill Floor | Northeast corner of drill floor, floor area sample | <2.5 | \leq 40 µg/ft ² |
| 120612-WWA-06 | Kitchen | Counter surface sample | <2.5 | \leq 40 µg/ft ² |
| 120612-WWA-07 | Entrance Hall | Floor sample | 4.7 | $\leq 200 \ \mu g/ft^2$ |
| 120612-WWA-08 | Converted IFR | Center floor sample | 4.5 | \leq 40 µg/ft ² |
| 120612-WWA-09 | Converted IFR | Right of entrance floor sample | 5.3 | \leq 40 µg/ft ² |
| 120612-WWA-10 | Converted IFR | Entrance floor sample | 71 | $\leq 40~\mu g/ft^2$ |
| 120612-WWA-11 | Vault 1 | Floor sample | 500 | $\leq 200 \ \mu g/ft^2$ |
| 120612-WWA-12 | Furnace Room | Floor sample | 1200 | $\leq 200 \ \mu g/ft^2$ |
| 120612-WWA-13 | Vault 2 | Floor sample | 170 | $\leq 200 \ \mu g/ft^2$ |
| 120612-WWA-14 | Locker Room | Floor sample | 17 | \leq 200 µg/ft ² |
| 120612-WWA-15 | Basement | Base of stairs | 290 | \leq 40 µg/ft ² |
| 120612-WWA- Blank | NA | NA | < 2.5 | NA |

The analytical results for the samples collected in the following areas exceeded the established criteria: converted IFR, entrance; vault 1; the furnace room; and at the base of the stairs in the basement.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 843 of 980 The laboratory report is supplied in Appendix J (Lab Reports). Photographs were taken of each sampling point and are presented in Appendix C (Photo Log).

4.2 Painted Surface Evaluation

The interior and the exterior painted surfaces of the Walla Walla Armory were inspected. Peeling paint was identified in three interior areas of the facility. One paint chip sample was collected from each of the three areas. One sample of deteriorated paint, collected from in the vault (Room 005), was identified as lead based paint. The analytical results are provided in the table below.

| Sample Number | Sample Area | Sample Location | Results % | Lead Based Paint |
|------------------------|------------------|-----------------|--------------|------------------|
| 120612-WWA- Bulk-P1 | Basement | Ceiling | 0.086 | No |
| 120612-WWA- Bulk-P2 | Vault (Room 005) | Pipe | 0.62 | Yes |
| 120612-WWA- Bulk-P3 | Room 51 | Windowsill | 0.062 | No |

The laboratory report is supplied in Appendix J (Lab Reports). Photographs were taken of each sampling point and are presented in Appendix C (Photo Log).

4.3 Water Damage and Limited Visual Fungal Growth Evaluation

During the inspection of the facility, water damage was observed in Room 012 of the basement. Fungal growth was not observed at the time of the IHSAV. A photo of the water damaged area is included in Appendix C (Photo Log).

4.4 Asbestos Documentation

Asbestos documentation was not available at the time of the IHSAV. SSG Pratt and SFC Paris Purnhagen indicated concern that floor tiles in the basement contained asbestos. A sample of the tile was collected from a loose edge. The sample was submitted to ALS in Salt Lake City, Utah. ALS analyzed the sample for asbestos using NIOSH 9002 method. Analytical results showed the tile analyzed did not contain asbestos.

IHSAV Walla Walla Armory Walla Walla, Washington Page 10 of 15

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4.5 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 ranged from 20.7 FC to 86.6 FC in the office spaces. The lighting in the supply rooms measured between 12.66 FC to 61.7 FC. Based on the above criterion, the lighting in some of the offices was below the recommended criteria of 50 FC.

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

The HVAC systems were functioning at the time of the IHSAV. was not aware if an HVAC maintenance plan was in place.

The average outdoor carbon dioxide concentration ranges between 300 and 400 parts per million (ppm); therefore, the maximum indoor CO_2 concentration recommended by the ASHRAE Standard would be between 1,000 and 1,100 ppm. Carbon dioxide concentrations throughout the facility were lower than 1,100 ppm; the highest CO_2 concentration measured was 781 ppm in room 019 in the basement.

The concentration of carbon monoxide ranged from 1 to 2 ppm. This concentration is below the exposure limit ceiling of 200 ppm set forth by NIOSH.

ASHRAE recommends maintaining temperatures between 68°F 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 60.8 to 68.8°F and relative humidity measured between 33.0 and 40.7% during the testing period.

4.7 Hazardous Material Storage and Use Procedures

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4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS)

Inventories of hazardous materials used by the Armory were not available at the time of the IHSAV.

4.7.2 Flammable Storage Cabinets

There are no HAZMAT storage lockers in use at the Armory.

4.7.3 Flammable and POL Storage

There is a no POL materials stored at the Walla Walla Armory

4.8 Safety Training and Record Keeping

Documentation of safety training was not available at the time of the IHSAV.

4.9 Ventilation Survey

The Walla Walla Armory did not have an exhaust system in the kitchen.

4.10 Sound-Level Measurements

Sound-level measurements were not collected during the operation of kitchen appliances in this Armory. No hazardous noise areas were identified during the IHSAV.

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4.11 Safety Walk-Through

- 1. Housekeeping throughout the facility was good.
- 2. Fire extinguishers are strategically located throughout the facility. Monthly fire extinguisher inspections were last performed in March 2012 and October 2012 (dates varied).
- 3. Fire evacuation plans are posted. Additional evacuation maps need to be posted throughout the facility. The second floor map does not reflect the current configuration of the offices.
- 4. Electrical hazards were noted throughout the facility. With Industrial Hygiene South West was notified of the hazards. The hazards noted during the IHSAV include: incomplete labeling of electrical panel A (basement), and panel B (1st floor); uncovered junction boxes in the locker room, supply room, room 12 (basement), hallway (basement), boiler room; missing faceplate in converted IFR, and the break room (2nd floor).
- 5. No eyewash stations are located at this facility.

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PROJECT LIMITATIONS 5.0

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 Where sample collection and testing have been performed, NES and fully evaluated. 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 Walla Walla Armory Walla Walla. Washington

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6.0 PROJECT APPROVAL

This IHSAV was reviewed and approved by:



July 12, 2013 Date

Technical Assistance: For technical assistance regarding information found in this report or the performed survey; please contact the second at 916-353-2360, or the second 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.

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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.

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).

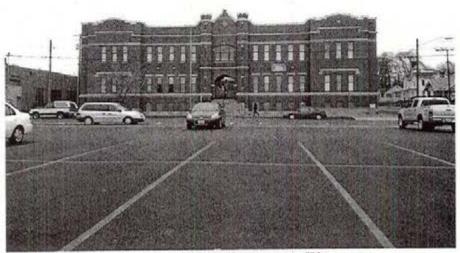


Photo 1: Front view of Walla Walla Armory, WA.

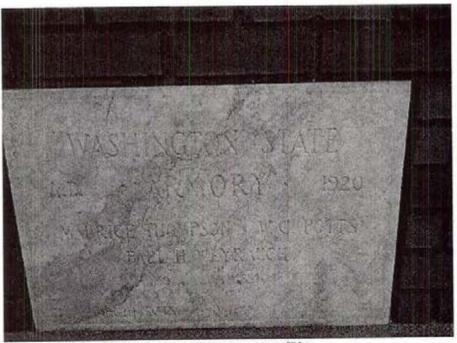


Photo 2: Signage for Walla Walla Armory, WA.



Photo 3: Lead wipe floor sample 120612-WWA-01 collected from southwest corner of Drill Floor.

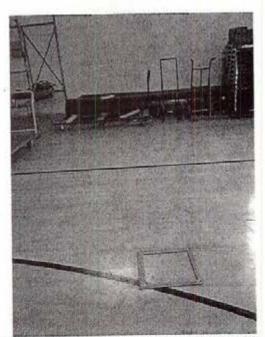


Photo 4: Lead wipe floor sample 120612-WWA-02 collected from southeast corner of Drill Floor.

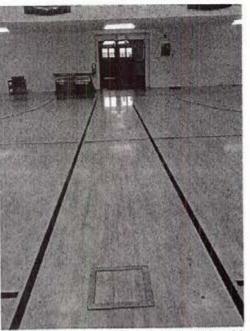


Photo 5: Lead wipe floor sample 120612-WWA-03 collected from center of Drill Floor.

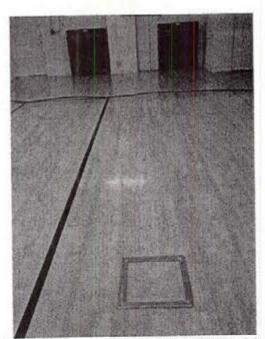


Photo 6: Lead wipe floor sample 120612-WWA-04 collected from northwest corner of Drill Floor.

PHOTO LOG WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

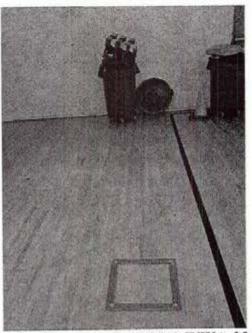


Photo 7: Lead wipe floor sample 120612-WWA-05 collected from northeast corner of Drill Floor.



Photo 8: Lead wipe sample 120612-WWA-06 collected from Kitchen counter.



Photo 9: Lead wipe floor sample 120612-WWA-07 collected from Entrance Hall.

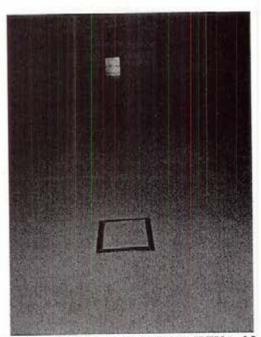


Photo 10: Lead wipe floor sample 120612-WWA-08 collected from center of Converted IFR.

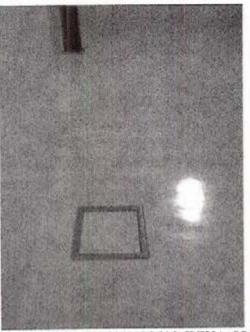


Photo 11: Lead wipe floor sample 120612-WWA-09 collected from right of the entrance of Converted IFR.

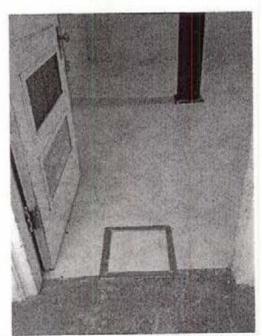


Photo 12: Lead wipe floor sample 120612-WWA-10 collected from entrance of Converted IFR.

PHOTO LOG WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

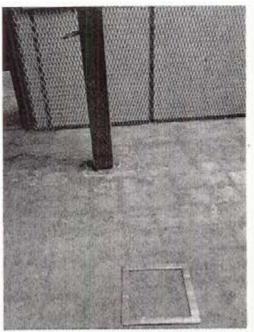


Photo 13: Lead wipe floor sample 120612-WWA-11 collected from Vault #1 (Room 005).

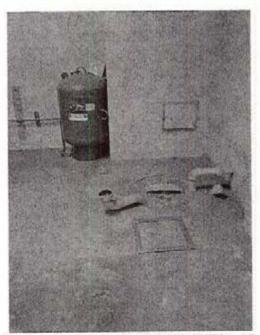


Photo 14: Lead wipe floor sample 120612-WWA-12 collected from Furnace room.

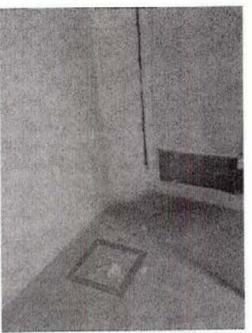
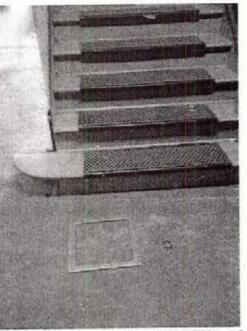
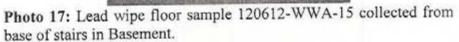


Photo 15: Lead wipe floor sample 120612-WWA-13 collected from Vault #2 (Room 014).



Photo 16: Lead wipe floor sample 120612-WWA-14 collected from Locker Room.





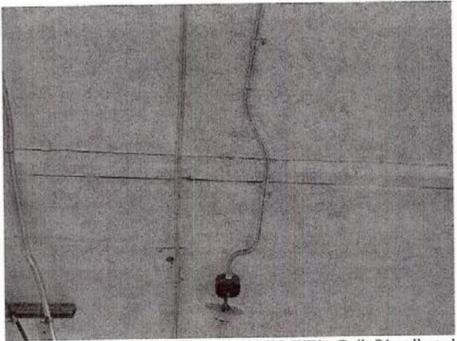


Photo 18: Lead bulk paint sample 120612-WWA-Bulk-P1 collected from Basement hallway ceiling adjacent to Converted IFR.

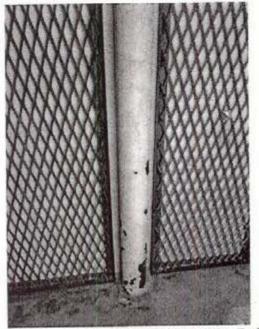


Photo 19: Lead bulk paint sample 120612-WWA-Bulk-P2 collected from pipe in Vault #1 (Room 005).

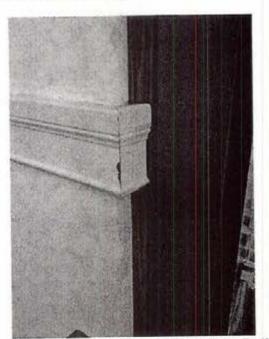


Photo 20: Lead bulk paint sample 120612-WWA-Bulk-P3 collected from windowsill of Labeled Room 51.



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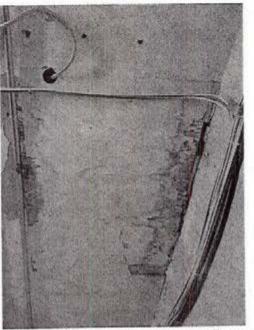


Photo 21: Water damage to ceiling in Basement Room 012.

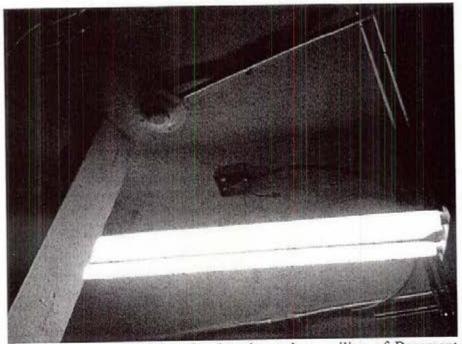


Photo 22: Uncovered junction box located on ceiling of Basement Supply Room 011.

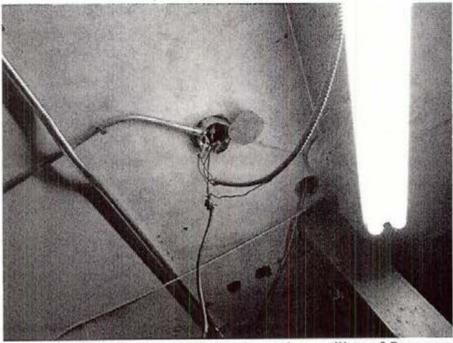


Photo 23: Uncovered junction box located on ceiling of Basement Room 012.



Photo 24: Fire extinguisher with expired inspection tag located in Basement.

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IAQ MEASUREMENTS WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

| Location | CO2 max permissible level 1,100 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO max permissible range 200 ppm. STEL |
|----------------|--|--|---------------------------------------|---|
| | | 1 st Floor | | |
| 100 Lobby | 676 | 63.8 | 39.1 | - |
| Room 104 | 443 | 64.1 | 38.7 | 1 |
| Room 105 | 480 | 64.5 | 38.7 | 1 |
| 106 Bathroom | 482 | 63.3 | 38.3 | 1 |
| 107 Drill Room | 470 | 65.2 | 33.7 | 2 |
| 108 Pantry | 488 | 61.3 | 37.8 | 1 |
| 109 Kitchen | 462 | 61.7 | 34.8 | 1 |
| 110 Bathroom | 642 | 61.2 | 38.9 | 1 |
| 111 Playroom | 476 | 61.7 | 39.3 | 1 |
| Room 112 | 635 | 68.8 | 34.4 | 1 |
| Room 113 | 670 | 68.0 | 36.1 | 1 |
| Room 114 | 653 | 68.1 | 34.6 | 1 |
| Room 115 | 463 | 64.5 | 38.5 | 1 |

CO₂ = Carbon Dioxide °F = Fahrenheit

RH = Relative Humidity CO = Carbon Monoxide STEL = Short Term Exposure Limit

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IAQ MEASUREMENTS WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

| Location | CO2 max permissible level 1,100 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO max permissible range 200 ppm. STEL |
|----------------|--|--|---------------------------------------|---|
| | | 2 nd Floor | | |
| 2001 Balcony | 449 | 62.8 | 39.2 | 1 |
| Hallway | 551 | 63.4 | 38.3 | 1 |
| Room 2002 | 557 | 62.5 | 39.2 | 1 |
| 2002 West Room | 452 | 62.0 | 40.4 | 1 |
| Supply | 482 | 62.3 | 39.5 | 1 |
| Room 2003/2004 | 470 | 62.9 | 38.8 | 1 |
| Room 2005 | 495 | 62.8 | 39.8 | 1 |
| Room 2006 . | 463 | 62.7 | 39.6 | 1 |
| 2007 East Room | 474 | 62.2 | 40.7 | 1 |
| 2007 NW Room | 439 | 62.2 | 40.2 | . 1 |
| 2007 West Room | 471 | 62.9 | 40.1 | 1 |
| 2007 SW Room | 539 | 62.9 | 40.4 | 1 |
| Bathroom | 449 | 62.9 | 38.7 | 1 |
| Hall NE Room | 493 | 63.7 | 40.5 | 1 |

CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

STEL = Short Term Exposure Limit

IAQ MEASUREMENTS WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

| Location | CO2 max permissible level 1,100 ppm | Temperature permissible range 68 - 75°F | RH% permissible range 30-60% | CO max permissible range 200 ppm. STEL |
|------------------|--|--|---------------------------------------|---|
| | | Basement | | |
| 001 Hallway | 450 | 61.8 | 39.7 | 1 |
| 003 Riffle Range | 463 | 64.8 | 33.8 | 1 |
| 004 Supply Room | 493 | 62.9 | 36.0 | 1 |
| Room 005 Vault | 526 | 62.5 | 37.4 | 1 |
| 006 Supply Room | 446 | 60.8 | 39.0 | 1 |
| 007 Locker Room | 469 | 62.0 | 40.4 | 1 |
| 010 Latrine | 484 | 62.1 | 39.5 | 1 |
| 011 Supply Room | 437 | 62.3 | 39.8 | 1 |
| Room 012 | 462 | 61.7 | 35.7 | 1 |
| 013 Latrine | 475 | 61.6 | 37.1 | 1 |
| 014 Vault | 474 | 63.3 | 38.5 | 1 |
| Room 017 | 529 | 62.7 | 38.1 | 1 |
| Room 018 | 512 | 63.0 | 37.8 | 1 |
| Room 019 | 781 | 63.4 | 38.6 | 1 |
| 020 Furnace | 770 | 66.5 | 33.0 | 1 |
| Room 022 | 509 | 63.4 | 35.2 | 1 |
| Room 023 | 506 | 64.1 | 34.4 | 1 |

CO2 = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

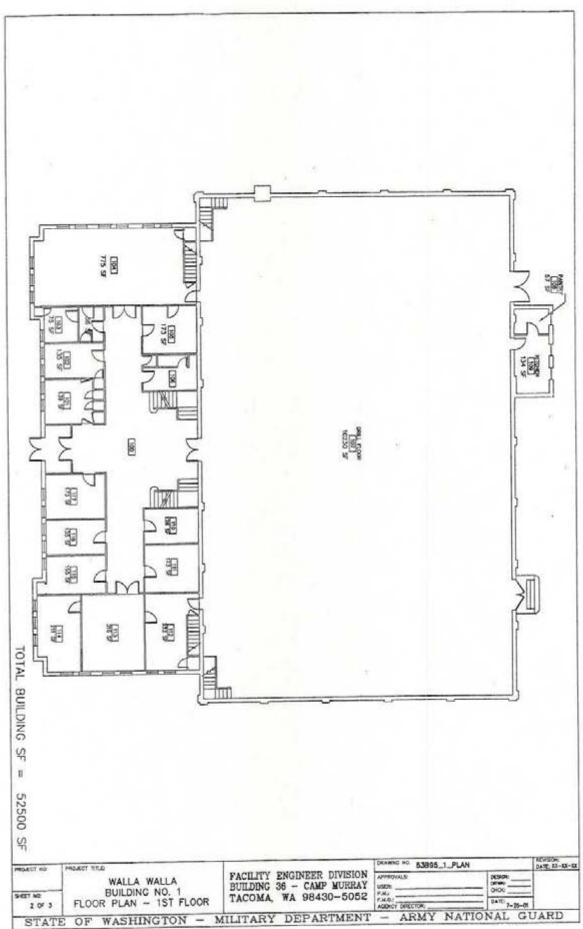
STEL = Short Term Exposure Limit

ILLUMINANCE SURVEY

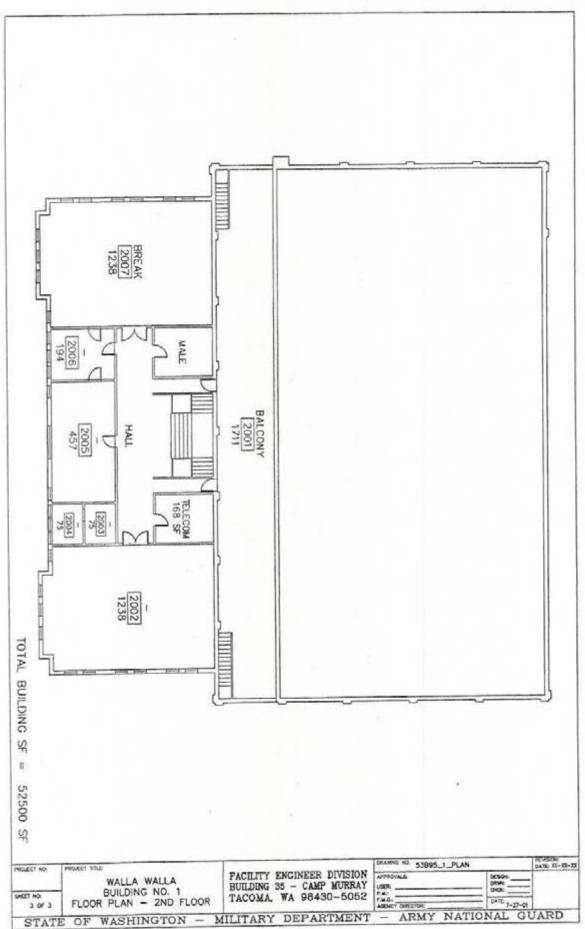
WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

| Location | Light (FC) | Minimum lighting requirements (FC) |
|----------------|--|--|
| | 1 st Floor | |
| 100 Lobby | 11.39 | 30 |
| Room 104 | 69.3 | 50 |
| Room 105 | 14.28 | 50 |
| 106 Bathroom | 40.1 | 30 |
| 107 Drill Room | NW 58.7, NE 44.0, SE 61.0, Center 73.1 | 50 |
| 108 Pantry | 23.5 | 10 |
| 109 Kitchen | 39.5 | 30 |
| 110 Bathroom | 17.35 | 30 |
| 111 Playroom | 30.5 | 30 |
| Room 112 | 55.8 | 50 |
| Room 113 | 52.5 | 50 |
| Room 114 | 20.7 | 50 |
| Room 115 | 23.1 | 50 |

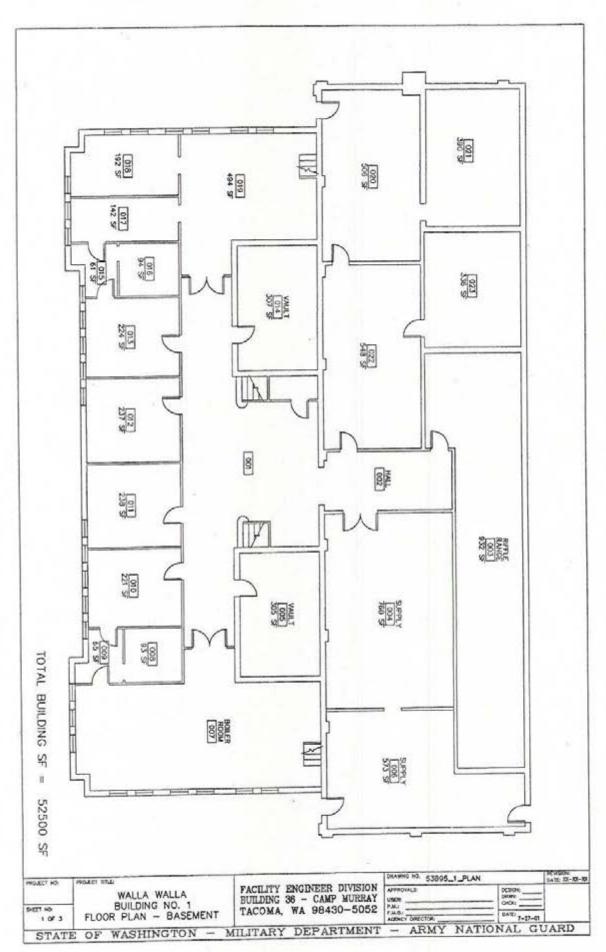
FC= foot candle measurement



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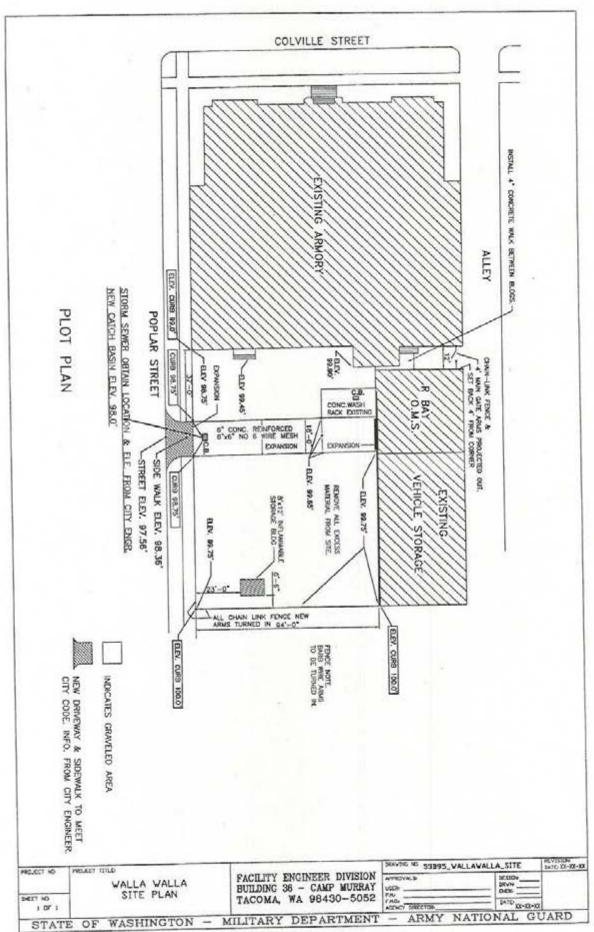
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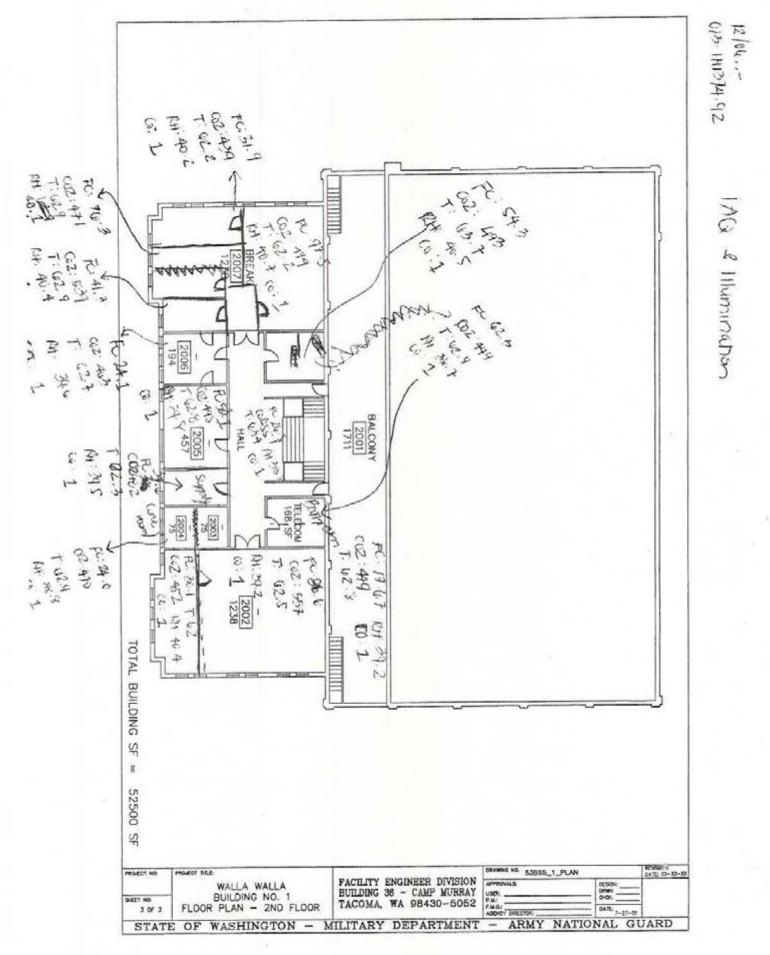


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Facility Information

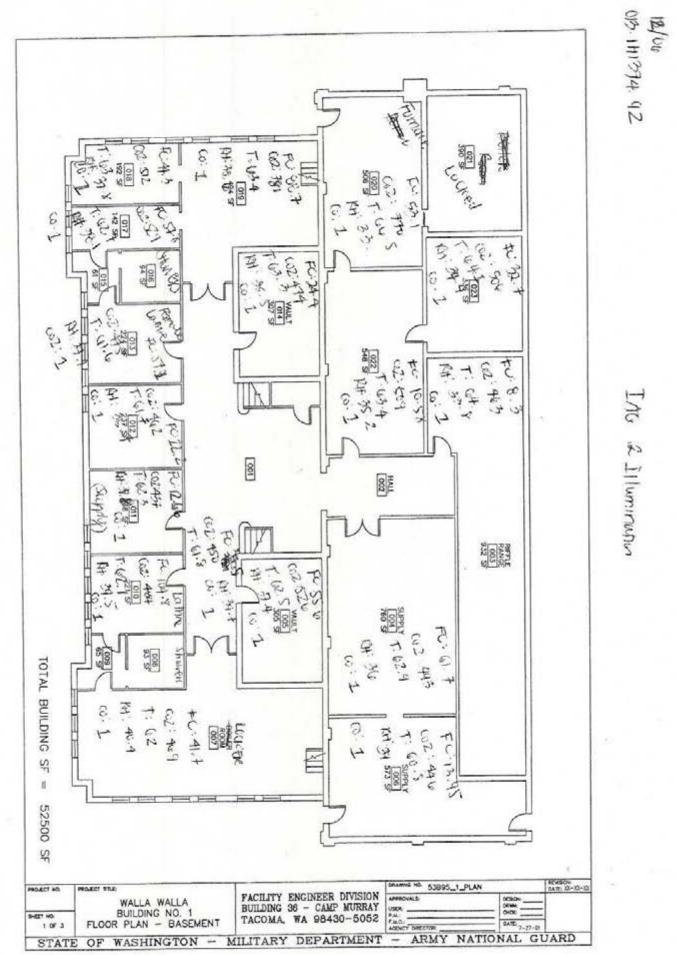
012-11+12+4-92 12/0/12

| 1. | Date Prepared: |
|-----|---|
| 2. | Names (and company name) of Personnel Conducting IH SAV |
| ~ | |
| 3. | Facility Name and Brief Summary of Primary Activities Conducted at Facility: |
| 4. | Facility Address: 113 S Colville St. Walla Walla, WA 99362 |
| 5. | Primary Unit Assigned to Facility: Det 1 E Co 181 BSB |
| 6. | Co-Tenant Units Assigned or Working Within Facility (LIST ALL): |
| 7. | Square Feet Area of Facility:DOC: (date of construction) |
| 8. | Work Schedule: M-F 0800-1630 |
| 9. | Number of Work Bays:3 |
| 10. | Equipment Density and Type: NA |
| | a. List Nomenclature Serviced or Maintained at Facility: |
| | b. List Total Number for Each Nomenclature Services or Maintained at Facility: |
| 11. | Total Number of Personnel: 2 |
| 12. | No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 2 |
| 13. | No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 0 |
| 14. | Total Number of Personnel Enrolled in the Hearing Conservation Program: |
| 15. | Total Number of Personnel Enrolled in the Respiratory Protection Program: |
| 16. | Total Number of Personnel Enrolled in the Medical Surveillance Program: |
| 17. | Total Number of Personnel Enrolled in the Vision Program: |
| 18. | Facility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to: |
| 19. | Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: |
| 20. | Facility Telephone Number:509-225-2291 Fax: |
| | |



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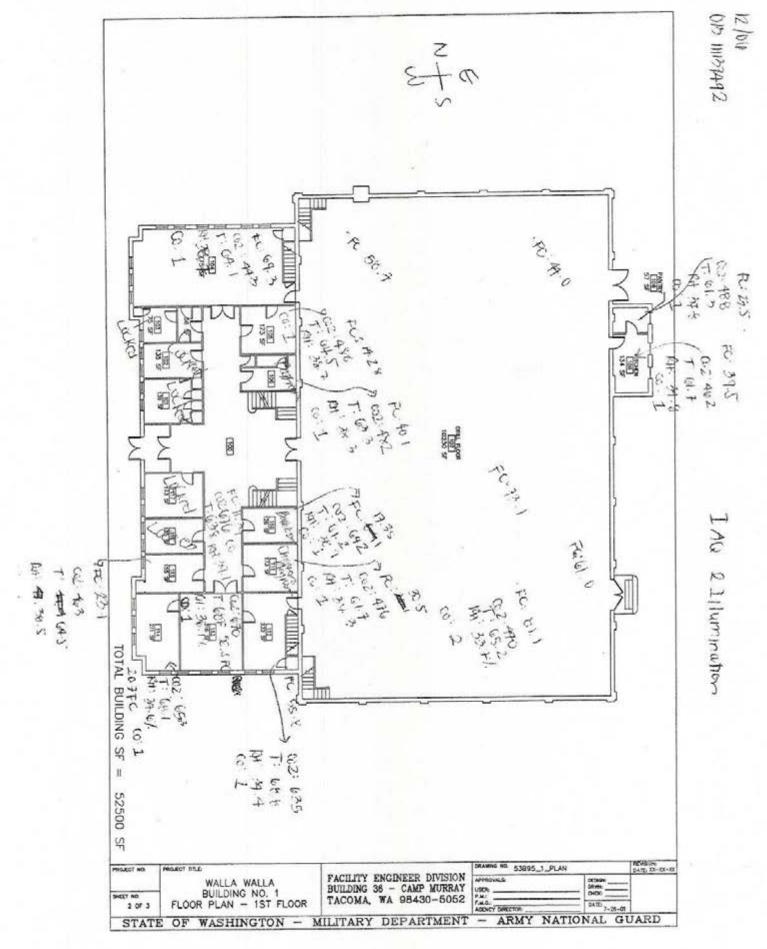
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'age 1 of 3

Wipe Sampling Summary Form

| NES Job #013. 111374.92 Collected By |
|--|
| Sample # 01 Analyte Lead Sample Collected From Drill Floor SW corner |
| Wipe Area units Date _12/6/12 Time |
| Sample # 02 Analyte Lead Sample Collected From Drill Floor SE corver |
| Wipe Area 1 units <u><u><u></u></u> <u>Units</u> <u><u></u> <u>Units</u> <u><u></u> <u>Units</u> <u><u></u></u> <u>Units</u> <u><u></u> <u>Units</u> <u><u></u></u> <u>Units</u> <u><u></u> <u>Units</u> <u><u></u> <u>Units</u> <u><u></u></u> <u>Units</u> <u><u></u> <u>Units</u> <u><u></u> <u>Units</u> <u>Un</u></u></u></u></u></u></u></u></u> |
| Sample # 03 Analyte Sample Collected From Onll Floor center |
| Wipe Area 1 units FF2 Date 12/6/17 Time |
| Sample # 04 Analyte Lead Sample Collected From NW dr.11 Floor |
| Wipe Area 1 units f+2 Date 12/6/12 Time Sample # 05 Analyte Lead Sample Collected From NE drill Floor |
| Wipe Area 1 units F12 Date 12/6/12 Time |

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

rage 2 of 3

Wipe Sampling Summary Form

| NES Job # 013 111274 92 Collected By | |
|---|-------------------|
| Sample # 10 Analyte lead Sample Collected From k. Johen | |
| Wipe Area units <u><u><u></u></u> <u>Uate</u> <u>12/6/12</u></u> | <u>Time</u> |
| Sample # 07- Analyte | 7 0 |
| Sample Collected From Entrance Hall 1 | =+ floor |
| Wipe Area 1 units $\frac{12}{10}$ Date $\frac{12}{10}$ | <u>Time</u> |
| Sample # Ur Analyte Sample Collected From Converted IFR min | ddle Floor |
| Wipe Area j units F ² Date 12/6 | <u>Time</u> |
| Sample # 09 Analyte /ead Sample Collected From Converto IFR to | right of entrance |
| Wipe Area units <u><u></u><u></u><u><u></u><u></u><u></u><u>units</u> <u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u><u></u></u></u></u> | <u>Time</u> |
| Sample # 10 Analyte lead | |
| Sample Collected From C. IFR entrance | · e |
| Wipe Area units F12 Date 12/6 | <u>Time</u> |
| Network Environmental Systems, Inc. | |

Folsom, California 95630

BEST AVAILABLE COPY Wipe Sampling Summary 12/06/12 Wallo Wall & Armory (WA) Rige 3 of 3 UNRES Lead 616.1111574.92 (samples) Vault Floor 2 F1 Sample #11: lead Furnace room Floor Som 10 # 12: ead Floor Sample # 13. ead Floor locker noom Sample #14: ead base Floor at \$ stairs Sample #15 ead Photo log 25 building dril Floor ea dril Dor #2 #3 ead outer oor 00 drill -loer N) **#**4 44 eal mi #(0 Counter A7 end Hall ead Entrance #4 #7 conter ead #8 FR 49 49 FR right of ontravice 0 Y) trance

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 878 of 980

pg. 4

12/06/12 (10 IH1074 92 Picture Log lead bulk Painf #1 #12 basement celling hallway adjacent to convented IFR le suspected ACM bisement Floor #13 where #11 Vaulty Floor room 005 #14 lend Pail Chip lend room 005 Ħ DiDC pe #12 furnade 廿 0 wi 1-605 N Valalt thor # æ Wipe_ # lead when # lead basement loor at base Stairs The NE now) Drill Fluor (10 #20 (to the (w) 21 FOOY Dnill to the S Kirchen 22 (Bisenn+ Room 019 23 vauit 64 014 (Burner) 24 IFR 25 fumace Room, Basement) Rosm 020 20 Vault 005 Bigment) 27 fore Echnoquesher Tag 28 (not labeled bracker) Roemant 29 rinel Koon posencht LOCKER 30 Junchon 120x in later Open YUOm 21 uncovered gourd? 32 supply nom うら 602 4 _ K " uniorered RN. Jon Birnet han box (Room 012 35 water damage Roum 13Kn-ent

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 879 of 980

rg.S

| | 013-1111374.92 Merune lug 12/04/12 |
|---------------------------|--|
| n bel elle d'illine en el | 37: uncapped pipe , Roun 012 Basement |
| | 34: uncapped winnig from ceiling Room UZ Basement |
| | 34. IFR yen the plate Basement |
| | 40 unappea tou plye, Reservent Hullway |
| | 11 Front Photace (1st Mary) |
| | 42' ISI Floor, (S view) entrume |
| | 45' Ist Hour (N view) - entrance |
| | 44: Panel B 1st floor, (unlabeled) |
| | to Break Room not ascered lighBuitch |
| and the contract | 46 view to The S, Red Hour Hallway |
| | 47 Balcony View to the S |
| | 48 Room 2002 classroom, (2nd Floor) |
| | 199: Wishington Annory Signage. 50: Runt chip 2nd Floor (laboled room 57) |
| معمقية المالي و | |
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May, 2018

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OIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 880 of 980

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

| | 12/6/12 |
|---|--|
| Five lead wipe samples collected from drill floor (take samples from dusty horizontal floor surfaces) | Ves |
| Are any weapons cleaned in the facility, if yes where are they cleaned? | NANO |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Ves |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | Ves |
| Is there any peeling paint? Take bulk sample if able. | Ves |
| Are there any signs of water damage or mold? | Water damage in basement, Room 012 |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | Kes, Floor tiles basement Some war at entrance (Ves) |
| Quality of housekeeping | Good |
| HVAC maintenance plan in place? | Unknown (likely to be handled by state maintenance |
| Overall condition of HVAC system | Boller system has exposed wiring at junction boxes photoco taken |
| Obtained CO2, Temp, RH monitoring | Ves, see map |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | Not in place of yet. - Not as of yet |
| HAZMAT storage, Condition of lockers, ^N if outside storage building is used is it ventilated and does it meet OSHA standards. | NA |

| ire alarm in working condition - not usually in place in older armories | 1 NA |
|---|---|
| Fire extinguishers in place and properly identified and mounted | Ves |
| Evidence of monthly fire extinguisher inspections | Last documented hispection October 200 (Personnel changes occurred) |
| Annual fire extinguisher inspections tags current | Ves |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | No |
| Egress routes accessible and properly markednoted on Fire Evacuation Plan | Fire evacuation map needs to be updated. The second Floor has been reconsigured. Additional maps needed through out the facility. |
| Training programs in place; Hazcom, Respiratory Protection, Confined Spaces NA Hearing conservation, PPE (if applicable) | Cauld not be located |
| Any Photo labs | No |
| Any hazardous noise sources | NO |
| Light levels checked throughout building | Yes |
| Breaker panels properly labeled with no exposed wiring | No, exposed wining in places other than breaker boxed Several break boxes are missing labeling |
| Check building occupancy | 0 |
| 1. How many military personnel, how many civilian personnel | ladmin & 1 recruiter |
| 2. What types of units occupy facility, i.e. Administrative, Maintenance, etc.? | Admin units only |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | The Sacility is rented out to civillans nonce every other month for parties 2 balls |
| Obtain two lead air samples | Un IHSW Request Unly |

| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | No kitchen exhaust hood |
|---|---|
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | No hazardous noise sources |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Many exposed electrical wires, seconnection not in junction boxes, several outlets with out face plates |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Yes |
| Name of Armory, POC, phone #, address and organizations in Armory | 113 5C Ol Ville St Walla Walla WA 509-225-2291 Forward support company, Admin Forward (Add Checklist to Report) |
| (Add Checklist to Report) | (Add Checklist to Report) |

Tektronix

Certificate of Calibration

6209119 Certificate Page 1 of 1

Instrument Identification

Company ID: 607229 INDUSTRIAL HYGIENE SW

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

PO Numb

 Certificate Information

 Reason For Service: CALIBRATION
 Technician

 Type of Cal: NORMAL
 Cal Date 22May2012

 As Found Condition: IN TOLERANCE
 Cal Due Date: 22May2013

 As Left Condition: IN TOLERANCE
 Interval: 12

 Procedure: MINOLTA T-1M ILLUMINANCE METER
 Temperature: 24.0

 Remarks:
 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 B Service Representative

| | | Calibra | tion 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 & NORTHRUI | 4360 | 09Aug2011 | 09Aug2012 |

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 884 of 980



Service Solutions

DATASHEET

| Manufacturar | Minolta |
|---------------|---------|
| Manufacturer: | Willond |

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 |
|---|---------------|----------|--------|---------|--------|-----|------|
| | 10.00 | 10.1 | P | 10.1 | Р | 9.7 | 10.3 |
| 30fC (resolution: .1 fC) 300 fC (resolution: 1 fC) | 100.0 | 100.1 | P | 100 | P | 97 | 103 |
| 300 fC (resolution: 10 fC) | 1000.0 | 1000.0 | Р | 999 | P | 970 | 1030 |

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

Page 1 of 1

GrayWolf Calibration Information: www.wolfsense.com/calibration.html Phone: (203) 402-0477 ^ .vW^* on the web: www.graywolfsensing.com

GrayWolf Sensing Solutions

| arbon Dioxide: s/n 012149 Actual: Measured: | Temperature Check: Actual: Measured: | Company Name: 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 | IQ-410 N/A |
| 1250ppm 1250ppm | 43.2°C 43.2°C | | Probe So Display So |
| Carbon Monoxide: s/n 11031536110 Actual: Oppm Measured: Oppm | Relative Humidity Check: Actual: 0.0%F Measured: 0.0%F | | Probe Software Version: 1. Display Software Version: |
| noxide: s/n 1: Actual: Measured: | amidity C Actual: Isured: | | 1.3,0,38 N/A |
| 1031536110 Oppm Oppm | re Humidity Check: Actual: 0.0%RH Measured: 0.0%RH | <u>Ambie</u> Rela Barom | Display S |
| 97.3ppm 97.3ppm | 75.3%RH 75.3%RH | Ambient Conditions: Temperature: 23.9°C Relative Humidity: 33.7%RH Barometric Pressure: 1010.4mbar | Serial Number: Display Serial Number: |
| | | 9°C 7%RH 10.4mbar | 01-624 N/A |

GrayWolf Sensing Solutions Calibration Certificate

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 886 of 980

Ca

TABLE 1 LEAD WIPE SAMPLE RESULTS WALLA WALLA ARMORY WALLA WALLA, WA DECEMBER 6, 2012

| Sample Number | Sample Area | Sample Location | Results (µg/ft ²) | ARNG/HUD Standard |
|----------------------|---------------|---|-------------------------------|-----------------------------------|
| 120612-WWA-01 | Drill Floor | Southwest corner of drill floor, floor area sample | < 2.5 | $\leq 40~\mu g/ft^2$ |
| 120612-WWA-02 | Drill Floor | Southeast corner of drill floor, floor area sample | 4.6 | \leq 40 μ g/ft ² |
| 120612-WWA-03 | Drill Floor | Center, middle of drill floor, floor area sample | 4.0 | \leq 40 µg/ft ² |
| 120612-WWA-04 | Drill Floor | Northwest corner of drill floor, floor area sample | 2.6 | $\leq 40 \; \mu g/ft^2$ |
| 120612-WWA-05 | Drill Floor | Northeast corner of drill floor, floor area sample | <2.5 | \leq 40 µg/ft ² |
| 120612-WWA-06 | Kitchen | Counter surface sample | <2.5 | $\leq 40 \ \mu g/ft^2$ |
| 120612-WWA-07 | Entrance Hall | Floor sample | 4.7 | $\leq 200 \ \mu g/ft^2$ |
| 120612-WWA-08 | Converted IFR | Center floor sample | 4.5 | \leq 40 µg/ft ² |
| 120612-WWA-09 | Converted IFR | Right of entrance floor sample | 5.3 | $\leq 40 \ \mu g/ft^2$ |
| 120612-WWA-10 | Converted IFR | Entrance floor sample | 71 | $\leq 40~\mu g/ft^2$ |
| 120612-WWA-11 | Vault 1 | Floor sample | 500 | $\leq 200 \ \mu\text{g/ft}^2$ |
| 120612-WWA-12 | Furnace Room | Floor sample | 1200 | $\leq 200 \ \mu\text{g/ft}^2$ |
| 120612-WWA-13 | Vault 2 | Floor sample | 170 | $\leq 200 \ \mu g/ft^2$ |
| 120612-WWA-14 | Locker Room | Floor sample | 17 | $\leq 200 \; \mu g/ft^2$ |
| 120612-WWA-15 | Basement | Base of stairs | 290 | \leq 40 μ g/ft ² |
| 120612-WWA- Blank | NA | NA | < 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

Report Date: December 14, 2012

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

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

Workorder: 34-1234527 Client Project ID: Walla Walla Armory Purchase Order: 013.IH1374.92 Project Manager:

| Ana | lytica | Resu | lts |
|------|--------|-------------|-----|
| PUTM | 1 | | |

| Sample ID: 120612-WWA-Blank | Me | dia: Ghost Wipe |) | Collected: 12/06/2012 |
|-----------------------------|--|-----------------------|----------------|--|
| Lab ID: 1234527001 | Sampling Locat | ion: Walla Walla | a Armory | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | Sampling Parameter: Area Not Applicable | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | <2.5 | NA | 2.5 | |
| Sample ID: 120612-WWA-01 | Me | Collected: 12/06/2012 | | |
| Lab ID: 1234527002 | Sampling Location: Walla Walla Armory | | | Received: 12/10/2012 |
| hod: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <2.5 | <2.5 | 2.5 | 10 - 12 - 20 - 20 - 20 - 20 - 20 - 20 - |

| Sample ID: 120612-WWA-02 | Media: Ghost Wipe Sampling Location: Walla Walla Armory Sampling Parameter: Area 1 ft ² | | | Collected: 12/06/2012 |
|--------------------------|--|--------------------|----------------|--|
| Lab ID: 1234527003 | | | | Received: 12/10/2012 Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Method: NIOSH 7300 Mod. | | | | |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 4.6 | | | |

| Sample ID: 120612-WWA-03 | Media: Ghost Wipe Sampling Location: Walla Walla Armory Sampling Parameter: Area 1 ft ² | | | Collected: 12/06/2012 |
|--------------------------|--|--------|----------------|--|
| Lab ID: 1234527004 | | | | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 4.0 4.0 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 ALS GROUP USA, CORP. Part of the ALS Laboratory Group

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Fri, 12/14/12 4:40 PM

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Workorder: 34-1234527 Client Project ID: Walla Walla Armory Purchase Order: 013.IH1374.92 Project Manager:

| Sample ID: 120612-WWA-04 | Med | 9 | Collected: 12/06/2012 | |
|--------------------------|--|-----------------|-----------------------|--|
| Lab ID: 1234527005 | Sampling Location: Walla Walla Armory | | | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | Sampling | g Parameter: Ar | ea 1 ft² | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 2.6 | 2.6 | 2.5 | |
| Sample ID: 120612-WWA-05 | Media: Ghost Wipe | | | Collected: 12/06/2012 |
| Lab ID: 1234527006 | Sampling Locati | on: Walla Walla | a Armory | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | Samplin | g Parameter: Ar | ea 1 ft² | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <2.5 | <2.5 | 2.5 | |
| Sample ID: 120612-WWA-06 | Media: Ghost Wipe | | | Collected: 12/06/2012 |
| Lab ID: 1234527007 | Sampling Location: Walla Walla Armory | | | Received: 12/10/2012 |
| .hod: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | <2.5 | <2.5 | 2.5 | |
| Sample ID: 120612-WWA-07 | Mee | dia: Ghost Wipe | 9 | Collected: 12/06/2012 |
| Lab ID: 1234527008 | Sampling Locat | on: Walla Walla | a Armory | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | Samplin | g Parameter: An | ea 1 ft² | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 4.7 | 4.7 | 2.5 | |
| Sample ID: 120612-WWA-08 | Media: Ghost Wipe | | | Collected: 12/06/2012 |
| Lab ID: 1234527009 | Sampling Location: Walla Walla Armory | | | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 4.5 | 4.5 | 2.5 | |

IHREP-V10.9



Workorder: 34-1234527 Client Project ID: Walla Walla Armory Purchase Order: 013 IH1374.92 Project Manager:

| . Me | Collected: 12/06/2012 | | |
|--|--|---|--|
| Sampling Locat | Received: 12/10/2012 | | |
| Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| ug/sample | ug/ft² | RL (ug/sample) | |
| 5.3 5.3 2. 5 | | | |
| | Sampling Locat Samplin ug/sample | Sampling Location: Walla Walla Sampling Parameter: Are ug/sample ug/ft ² | ug/sample ug/ft ² RL (ug/sample) |

| Sample ID: 120612-WWA-10 | Media: Ghost Wipe Sampling Location: Walla Walla Armory | | | Collected: 12/06/2012 | |
|--------------------------|--|--|--|-----------------------|--|
| Lab ID: 1234527011 | | | | Received: 12/10/2012 | |
| Method: NIOSH 7300 Mod. | Samplin | Prepared: 12/12/2012 Analyzed: 12/13/2012 | | | |
| Analyte | ug/sample | | | | |
| Lead | 71 | | | | |

| Sample ID: 120612-WWA-11 | Media: Ghost Wipe Sampling Location: Walla Walla Armory Sampling Parameter: Area 1 ft² | | | Collected: 12/06/2012 |
|--------------------------|--|--------|----------------|--|
| Lab ID: 1234527012 | | | | Received: 12/10/2012 Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| .thod: NIOSH 7300 Mod. | | | | |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| _ead | 500 | | | |

| Sample ID: 120612-WWA-12 | Media: Ghost Wipe | | | Collected: 12/06/2012 |
|--------------------------|--|--------|----------------------|--|
| Lab ID: 1234527013 | Sampling Location: Walla Walla Armory | | Received: 12/10/2012 | |
| Method: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 1200 | 1200 | 50 | |

| Sample ID: <u>120612-WWA-13</u> Lab ID: 1234527014 | Media: Ghost Wipe Sampling Location: Walla Walla Armory | | | Collected: 12/06/2012 Received: 12/10/2012 |
|---|--|--------------------|--|---|
| Method: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | Prepared: 12/12/2012 Analyzed: 12/13/2012 | |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 170 | 170 | 2.5 | |

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 890 of 980



Workorder: 34-1234527 Client Project ID: Walla Walla Armory Purchase Order: 013 JH1374.92 Project Manager

| Sample ID: 120612-WWA-14 | Media: Ghost Wipe | | | Collected: 12/06/2012 |
|--------------------------|--|--------------------|----------------|--|
| Lab ID: 1234527015 | Sampling Location: Walla Walla Armory | | | Received: 12/10/2012 |
| Method: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 17 | 17 | 2.5 | |

| Analyte Lead | ug/sample 290 | ug/ft ² 290 | RL (ug/sample) 2.5 | |
|--------------------------|--|---------------------------|-----------------------|--|
| Method: NIOSH 7300 Mod. | Sampling Parameter: Area 1 ft ² | | | Prepared: 12/12/2012 Analyzed: 12/13/2012 |
| Lab ID: 1234527016 | Sampling Location: Walla Walla Armory | | | Received: 12/10/2012 |
| Sample ID: 120612-WWA-15 | Media: Ghost Wipe | | Collected: 12/06/2012 | |

| Sample ID: 12612-WWA-Bulk P1 | Me | edia: Paint Chip | Collected: 12/06/2012 |
|------------------------------|---------------|--|-----------------------|
| Lab ID: 1234527017 | Sampling Loca | Received: 12/10/2012 | |
| thod: NIOSH 7300 Mod. | Samplin | Prepared: 12/13/2012 Analyzed: 12/14/2012 | |
| Analyte | % | RL (%) | |
| Lead | 0.086 | 0.0074 | |

| Sample ID: 12612-WWA-Bulk P2 | Me | edia: Paint Chip | Collected: | 12/06/2012 |
|------------------------------|---------------|------------------|--------------------------|------------|
| Lab ID: 1234527018 | Sampling Loca | Received: | 12/10/2012 | |
| Method: NIOSH 7300 Mod. | Samplin | | 12/13/2012 12/14/2012 | |
| Analyte | % | RL (%) | | |
| Lead | 0.62 0.0025 | | | |

| Sample ID: 12612-WWA-Bulk P3 | Me | edia: Paint Chip | Collected: 12/06/2012 |
|------------------------------|---|----------------------|--|
| Lab ID: 1234527019 | Sampling Loca | Received: 12/10/2012 | |
| Method: NIOSH 7300 Mod. | Sampling Parameter: Weight 0.1009 grams | | Prepared: 12/13/2012 Analyzed: 12/14/2012 |
| Analyte | % | RL (%) | |
| Lead | 0.062 | 0.0025 | |

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Workorder: 34-1234527 Client Project ID: Walla Walla Armory Purchase Order: 013 IH1374 92 Project Manager

| Sample ID: 12612-WWA-Asbestos | Media: Bulk | | Collected: 12/06/2012 |
|-------------------------------|---------------|--------------------------|-----------------------|
| Lab ID: 1234527020 | Sampling Loca | tion: Walla Walla Armory | Received: 12/10/2012 |
| Method: NIOSH 9002 | | | Analyzed: 12/14/2012 |
| Analyte | % | RL (%) | |
| Chrysotile | ND | 1.0 | |
| Amosite | ND | 1.0 | |
| Crocidolite | ND | 1.0 | |
| Actinolite/Tremolite | ND | 1.0 | |
| Anthophyllite | ND | 1.0 | |

Sample: 1234527007

NC/CAR-549 was initiated for this sample because approximately 10% or 0.4 to 0.5 mL out of the initial volume of digested sample was lost during digestion due to violent reaction of the sample after initial aliquot of concentrated nitric acid was added. The digestion was continued with the remaining digestate. Therefore, the reported lead result for this sample may be biased lower than the actual lead result.

Sample: 1234527012

The lead result for this sample was reported from 20X dilution data because of interferences. The reporting limit has been raised in proportion to the dilution level.

Sample: 1234527013

The lead result for this sample was reported from 20X dilution data because of interferences. The reporting limit has been raised in proportion to the dilution level.

Sample: 1234527017

The lead result for this sample was reported from 3X dilution data because of interferences. The reporting limit has been raised in proportion to the dilution level.

Report Authorization

| Method | Analyst | Peer Review |
|-----------------|---------|-------------|
| NIOSH 7300 Mod. | | |
| NIOSH 9002 | | |

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

IHREP-V10.9

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Workorder: 34-1234527 Client Project ID: Walla Walla Armory Purchase Order: 013.IH1374.92 Project Manager:

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 | ADE-1420 DATA1 UT00009 | http://www.aclasscorp.com http://health.utah.gov/lab/labimp/ http://ndep.nv.gov/bsdw/labservice.htm |
| | Oklahoma Iowa Florida (TNI) Texas (TNI) | UT00009 IA# 376 E871067 T104704456-11-1 | http://www.deq.state.ok.us/CSDnew/ http://www.iowadnr.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.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

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| | | REGULAR | Status | |
|--------------------------------------|---|---|--|--|
| | | | Is Requested - ADDITIONAL CHARGE | |
| CAL | 5) | CONTACT | DATE ALS SALT LAKE PRIOR TO SENDING SAMPLES | |
| Date 12/10/12 | Purchase Order No. 013-111374.92 | the second se | 4. Quote No. | |
| | NES: IN: | ······ | ALS Project Manager | |
| Company Name | | | | |
| | Mary St. | <u>ergel (El lestrocosciaes di</u> et -) Terr | 5. Sample Collection Sampling Site Walla Armany | |
| tokum | CA 95030 | | 1 | |
| Person to Costoct | | | Industrial Process | |
| Telephone | | | Date of Collection <u>12 e 2</u> | |
| Fax Telephone (| | | Time Collected | |
| E-mail Address | | where a string of colonge datase | Date of Shipment | |
| Billing Address (if d | | | Chain of Custody No. | |
| | | | 6. How did you first learn about ALS? | |
| | | | | |
| | | | | |
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| REQUEST FOR ANAL | | | ANALYOF DEGLIECTED, the method sumber if known | Units |
| Laboratory Use Only | 12 Gient States Aumber / In K- Matrix | Sample Volume | ANALYSES REQUESTED - Use method number if known | Units |
| | 120012-WWA - DI Taid uppes | 1 Sy . Ft. | | |
| | 12 DU12 - WWA - U2 1 | | 1 | |
| | 12 UD12 - WWA - U3 | Marine Contractor | / | |
| | 120612 WWA - DU | £ | | - |
| | 1212012 - WWA - US | | | |
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| | 120612- UNA - 10 1015 | la de Researce de la composición de la | V | |
| | 12412-444 -Bilk PI Chip | <i>r</i> | | |
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| | 12/012 - UNA - ASperitas - 41/2 | in: | | |
| Specify Solid sorbent | tube e.g. Charcoal: Filter type: Impinger solution | , Bulk sample; Bloc | d; Unne; Tissue: Soil: Water; Other | |
| * 1. µg/sample 2. mg/n | n ³ 3. ppm 4. % 5. µg/m ³ 6 (other) | Please indicate o | ne or more units in the column entitled Units** | |
| Comments | | in the second second | And a second | |
| A STANDARD ACTOR | | | | |
| | | | | |
| | nd/or Chemical Hazards | | | |
| . Chain of Custody (O | | | | |
| Relinquished by | | | | |
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EMPLOYEE LIST Walla Walla Armory Walla Walla, Washington

1. 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 the Walla Walla 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 Sampling Clean horizontal surfaces in these areas using the Armory Clean-up SOP included. Better housekeeping practices need to be implemented in order to prevent migration of lead into other areas of the facility.
- N4.2 Painted Surface Evaluation Consult with a Washington State certified lead abatement contractor to have the lead based paint areas removed and stabilized. The deteriorating lead based paint may be contributing to the excess lead dust on the floor of the Vault Room.
- N4.3 Water Damage and Limited Visual Fungal Growth Evaluation Determine the source of the water damage and if repairs are necessary. Perform repairs as needed.
- N4.4 Asbestos Documentation If an Asbestos Management Plan is not available for this facility, consult with WA state certified inspector to inspect the facility for asbestos containing material (ACM). If ACM is identified in the building, then an Operations & Maintenance Plan must be written and communicated to personnel working at this facility.
- N4.5 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.

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- N4.6 Heating, Ventilation, and Air-Conditioning Systems and Indoor Air Quality Increase the temperature to meet ASHRAE recommendations.
- N4.7.1 Hazardous Materials Inventory & Material Safety Data Sheets (MSDS) Prepare a hazardous materials inventory. Maintain corresponding MSDS with the inventory available to all employees.
- N4.8 Safety Training and Record Keeping Develop and implement a HAZCOM program. Provide and document training to employees, annually or as new hazardous materials are introduced. Records of training are to be maintained and available for review on site.

N4.11 Safety Walk-Through

2. Inspect all fire extinguishers monthly and document inspection date, and inspector's signature on the inspection tag.

3. Fire evacuation plan should be posted in each room, throughout the Armory to ensure occupants can escape during an emergency. Update the map to reflect the current configuration.

 Label each breaker with the corresponding function. Install covers on all junction and outlet boxes.

 Install an emergency eyewash station in accordance with 29 CFR 1910.151 if corrosive materials, which may damage the eyes, are used on site.

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; 120612-WWA-01, 02, 03, 04, 05 | | |
|---|--|--|--|
| Are any weapons cleaned in the facility, if yes where are they cleaned? | No, weapons are not cleaned at this facility. | | |
| Additional lead wipe samples taken from 25% of the rest of the building(on floor areas only) | Samples; 120612-WWA-06, 07, 08, 09, 10, 11, 12, 13, 14, 15 | | |
| Is there a converted indoor firing range? If so collect additional wipe samples IAW the SOW. | The indoor firing range is not in service. It has been remodeled into a storage area. Samples 120612-WWA-08, 09, 10 came from this area. | | |
| Is there any peeling paint? Take bulk sample if able. | Three bulk samples of peeling paint were obtained from the interior of the building. Samples were taken from the basement hallway ceiling, a pipe in Vault #1 (Room 005 and a windowsill in Labeled Room 51. Samples taken were from these areas were labeled; 120612-WWA- Bulk-P1, P2 and P3 respectively. | | |
| Are there any signs of water damage or mold? | Yes. Water damage was observed on the ceiling of Basement Room 012. | | |
| Any suspected ACM? Where and what condition is it in. Bulk sample if able. | Yes. An area of floor tiles in the basement was suspected to contain asbestos. Samples taken were labeled 120612- WWA-Asbestos. | | |
| Quality of housekeeping | The armory housekeeping is good. | | |
| HVAC maintenance plan in place? | It was unknown if an HVAC maintenance plan was in place. It was believed to likely be handled by state maintenance | | |
| Overall condition of HVAC system | The boiler system has exposed wiring at junction boxes. | | |
| Obtained CO2, Temp, RH monitoring | Yes. No CO ₂ levels above 1100. Temperature ranged from 60.8 to 68.8 degrees in the facility. Relative humidity levels were monitored between 33.8 and 40.7. | | |
| HAZMAT inventory on hand (make copies for the report), MSDS available for all materials. | No. HAZMAT inventory and MSDS are not in place as of yet. | | |

| HAZMAT storage, Condition of lockers, if outside storage building is used is it ventilated and does it meet OSHA standards. | No HAZMAT storage lockers are located at this facility. |
|---|--|
| Fire alarm in working conditionnot usually in place in older armories | No fire alarms are located at this facility. |
| Fire extinguishers in place and properly identified and mounted | Yes fire extinguishers are in place and properly mounted. |
| Evidence of monthly fire extinguisher inspections | Monthly fire extinguisher inspections are not current due to personnel changes. Last yearly inspection 2011. Last monthly inspection 3/06/12. |
| Annual fire extinguisher inspections tags current | No, annual inspection tags are not current. |
| Are eye wash stations available in areas where hazardous materials are used and are they inspected weekly (inspections must be documented) | There are no eye wash stations at the Walla Walla Armory. |
| Egress routes accessible and properly markednoted on Fire Evacuation Plan | Egress routes need to be updated following reconfiguration of the second floor layout. Additional maps need to be located throughout the facility. |
| Training programs in place; Hazcom, Respiratory Protection, Confined Spaces, Hearing conservation, PPE (if applicable) | Training programs could not be located. |
| Any Photo labs | No. |
| Any hazardous noise sources | No. |
| Light levels checked throughout building | Yes. Several rooms are not in accordance with the required lighting levels as indicated in Appendix E. |
| Breaker panels properly labeled with no exposed wiring | No, exposed wiring is present in places other than breaker boxes. Several breaker boxes are missing labeling. |
| 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 military personnel 2.) Recruiter and Administrative |
| Any civilian activities in armory (cub scouts, classes, day care, parties etc) | The Armory facility is occasionally rented out for parties This is a monthly occurrence. |

| Obtain two lead air samples | On IHSW Request Only; none taken. |
|--|---|
| Evaluate Kitchen Stove Hood Flow if Present IAW NFPA Standard 96. | No kitchen exhaust hood was present for testing. |
| Collect Source Noise Measurements of Kitchen Appliances and Document Using DD 2214 | There are no hazardous noise sources present at this facility. |
| Conduct a safety walkthrough of entire facility document any safety deficiencies found. | Many exposed electrical wires were located. Connections were not located within junction boxes. Several outlets were missing face plates. |
| Take photos of outside of building, all sample points and any pertinent hazards or concerns. | Photos included in Appendix C |
| Name of Armory, POC , phone # , address and organizations in Armory | Walla Walla Armory Phone: 509-225-2291 Email: craig.a.shearer@us.army.mil |
| (Add Checklist to Report) | Forward support company, administrative (Add Checklist to Report) |

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Facility Information

| 1 | Date Prepared: | | | | |
|-----|--|--|--|--|--|
| 2. | Names (and company name) of Personnel Conducting IH SAV: | | | | |
| 3. | Facility Name and Brief Summary of Primary Activities Conducted at Facility: | | | | |
| 4. | Facility Address: 113 S Colville St. Walla Walla, WA 99362 | | | | |
| 5. | Primary Unit Assigned to Facility: Det 1 E Co 181 BSB | | | | |
| 6. | Co-Tenant Units Assigned or Working Within Facility (LIST ALL): | | | | |
| 7. | Square Feet Area of Facility: DOC: (date of construction) | | | | |
| 8. | Work Schedule: M-F 0800-1630 | | | | |
| 9. | Number of Work Bays:3 | | | | |
| 10. | Equipment Density and Type: NA a. List Nomenclature Serviced or Maintained at Facility: b. List Total Number for Each Nomenclature Services or Maintained at Facility: | | | | |
| 11. | Total Number of Personnel: 2 | | | | |
| 12. | No. of Admin Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 2774 12 | | | | |
| 13. | No. of Maintenance Personnel (Include AGR, Fed., Tech., IDT, State or Contract Employee): 0 | | | | |
| 14. | Total Number of Personnel Enrolled in the Hearing Conservation Program: | | | | |
| 15. | Total Number of Personnel Enrolled in the Respiratory Protection Program: | | | | |
| 16. | Total Number of Personnel Enrolled in the Medical Surveillance Program: | | | | |
| 17. | Total Number of Personnel Enrolled in the Vision Program: | | | | |
| 18. | Facility Commander: a. E-mail address, Commercial Telephone Number and Unit Assigned to: | | | | |
| 19. | Safety Officer: a. E-mail address, Commercial Telephone Number and Unit Assigned to: | | | | |
| 20. | Facility Telephone Number:509-225-2291 Fax: | | | | |

015-1112+4-92 12/6/12

| FY 11 Instantion Status Report (ISR) Services Documentation | Intellicode | Q1 | Q2 | Q3 | 4 Annual |
|--|-------------|-----|----|----|----------|
| E E | 953-01-04 | 0 | | | |
| Controls Terrorathing Zone samples collected above Occupational Exposure Limit (OEL) | 953-01-04 | 0 | | | |
| Maimher of Dersonal Noise Dosimetry samples collected >= 85 dBA with no controls | 953-01-05 | 0 | | | |
| Maintee of Personal Noise Dosimetry samples collected >= 85 dBA | 953-01-05 | 0 | | | |
| Minimer of Noise Sound Level samples collected >= 140 dBP with no controls | 953-01-06 | 0 | | | |
| Mumber of Noise Sound Level samples collected >= 140 dBP | 953-01-06 | 0 | | | |
| Mumber of Noise Sound Level samples collected >= 140 dBP not controlled, that are | 953-01-07 | 0 | | | |
| Rumber of Noise Sound Level samples collected >= 140 dBP not controlled | 953-01-07 | 0 | | | |
| Bumber of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled, that are recommended for control | 953-01-08 | 0 | | 1 | |
| Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not | 953-01-08 | 0 | | | |
| Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are | 953-01-09 | 0 | | | |
| mumber of Personal Noise Dosimetry samples collected >= 85 dBA not controlled | 953-01-09 | 0 | | | BE |
| Total number of DOEHRS-IH shops coded as Priority 1 which have at least one task | 953-02-10 | IHT | | | ST AVA |
| Zetal mumber of DOFHRS-IH shops coded as Priority 1 | 953-02-10 | IHT | | | AILAI |
| Number of buildings for which all processes requiring a basic industrial hygiene | 953-02-11 | IHT | | | BLE CO |
| Number of buildings requiring a basic industrial hygiene characterization within the last 12 | 953-02-11 | IHT | | | PY |
| Number of buildings for which all processes requiring a basic industrial hygiene Pharacterization have received one within the last 12 months | 953-02-12 | THI | | | 3 |
| | 953-02-12 | IHT | | | |
| estimation the processes that were assessed for potential inhalation exposure to employees | 953-02-13 | IHI | | | |
| Soumber of processes that require an assessment for potential inhalation exposure to | 953-02-13 | IHT | | | |

Walla Walla Armory Walla Walla, Washington

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rev. 8/2012

| FY 11 Installation Status Report (ISR) Services Documentation | Intellicode | Q1 | Q2 | Q3 | Q4 Annual |
|---|-------------|-----|----|----|-----------|
| Mumber of processes that were assessed for potential inhalation exposure to employees | 953-02-14 | THI | | | |
| a Sumber of processes that require an assessment for potential inhalation exposure to Supplementation exposure to | 953-02-14 | IHT | | | |
| Mumber of personnel who were reassessed by industrial hygiene within the last 12 months. | 953-02-15 | IHT | | | |
| Bumber of personnel who required reassessment by industrial hygiene within the last 12 | 953-02-15 | IHT | | | |
| Bumber 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 the quantify their daily noise exposures within the last 12 months. | 953-02-17 | IHT | | | E |
| Bumber of personnel who require work shift dosimetry to quantify their daily noise exposures Within the last 12 months. | 953-02-17 | IHT | | | BEST AN |
| Rumber of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which were Espected and measured for airflow rates | 953-02-18 | 0 | | | /AILABI |
| Number of ventilation systems (e.g., spray paint booths, tailpipe exhausts, etc.) which require | 953-02-18 | 0 | | | LE COP |
| Number of ventilation systems which require corrective action based on deficiencies identified | 953-02-19 | 0 | | | Y |
| 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 appropriate to occupational health concerns | 953-02-20 | IHT | | | |
| ENumber of design review packages which required IH evaluation and recommendations sapplicable to occupational health concerns | 953-02-20 | IHT | | | |

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ARMY NATIONAL GUARD INDUSTRIAL HYGIENE - SOUTHWEST

Guam + Hawali + California + Oregon + Washington + Nevada + Arizona + Idaho + Utah + Wyoming + Montana + New Mexico + Nebraska

Industrial Hygiene Site Assistance Visit

Wenatchee Readiness Center (RC)-Indoor Firing Range (IFR) 604 Ringold Street Wenatchee, WA 98801

10510 Superfortress Avenue, Suite C, Mather, CA 95655 (91

(916) 854-1491

Posted to NGB FOIA Reading Room May, 2018

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 904 of 980 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

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

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

ARNG-CSG-P

07 DEC 2015

MEMORANDUM THRU Washington Army National Guard, ATTN 6224, 2n Division Dr, JBLM, WA 98433 OHN, Bldg.

FOR Commander, Wenatchee Readiness Center (RC), 604 Ringold Street, Wenatchee, WA 98801

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Wenatchee Readiness Center (RC) Indoor Firing Range (IFR), 604 Ringold Street, Wenatchee, WA 98801 on 07 JUL 2015.

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 (IHSAV) and evaluation of a space identified as IFR was conducted at the Wenatchee Readiness Center (RC)-Indoor Firing Range (IFR), at 604 Ringold Street, Wenatchee, WA 98801 on 07 JUL 2015.

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

e. This Readiness Center is occupied by a Recruiting Office and is has 2 Co-Tenants: Civil Air Patrol & Washington Valley College.

f. Knowledge or evidence of an Indoor Firing Range was not available. An IHSAV conducted in Oct 2014 disclosed lead dust particulates, below 40 ug/ft2, were found throughout the sampling field taken during this IHSAV. This would warrant future investigation when the facility has better access during a future IHSAV.

3. Findings. See survey report.

4. Commendable.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 906 of 980

ARNG-CSG-P

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SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Wenatchee Readiness Center (RC) -Indoor Firing Range (IFR), 604 Ringold Street, Wenatchee, WA 98801 on 07 JUL 2015.

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. Asbestos Survey for this facility was not located. (para. 4.4.1/4.4.2) (RAC 3)

(1) Conduct a facility survey to identify Asbestos Containing Material (ACM) within the facility and develop ACM Management Plan.

(2) Conduct awareness training to all personnel who occupy the facility regarding the findings and the ACM Management Plan. The survey may have been completed, however, at the time of this assistance visit awareness training, ACM identification, or an ACM Management Plan was not available.

b. Housekeeping practices were not completely evaluated. (Exec. Summary) (RAC 4)

(1) Re-evaluate general housekeeping practices during next SAV, providing access into locked areas is provided for the visiting Industrial Hygienist.

(2) Continue current housekeeping practices. Clean-up after every weapons cleaning episode and if tables are used for this purpose they should be labeled as "weapons cleaning only" on the tables utilized.

c. The monthly and annual fire extinguisher check/inspections were not current. (para. 4.11.1) (RAC 3)

(1) Conduct the fire extinguisher monthly check and annual inspections.

(2) Ensure electrical panels are not blocked for ease of access for facility personnel.

d. Improperly stored fluorescent lamps, a universal waste, were noted in the mechanical room. (para. 4.16) (RAC 4).

(1) Ensure spent fluorescent lamps are stored IAW Washington Administrative Code 173-303-573: Standards for universal waste management.

e. Outlets in the kitchen area are not GFCI protected. (para. 4.11.2) (RAC 3)

(1) Install a GFCI outlet in the kitchen near the sink(s). Outlets located within 6 feet of a water source should be GFCI protected.

f. Storage within the mechanical room blocks electrical panel access. (para. 4.11.5) (RAC 4)

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ARNG-CSG-P

SUBJECT: Executive Summary for Industrial Hygiene Site Assistance Visit (IHSAV) for Wenatchee Readiness Center (RC) Indoor Firing Range (IFR), 604 Ringold Street, Wenatchee, WA 98801 on 07 JUL 2015.

J. IHSW also 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 ARNG Industrial Hygiene Tech, Occupational Health and Safety Professions.

e. The Hazard Assessments provided may be used as examples for some of the facilities processes. Additional operations can utilize this format to design HA not observed during this IHSAV.

f. 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 State ARNG Industrial Hygiene, Occupational Health and Safety Office for final review and approval (signature).

g. IHSW recommends using the completed and approved Hazard Assessments for monthly meetings to brief/train, and document large group training events and activities (5 minute topics)

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 NGB-IHSW office at (916) 854-1491 or via email at



NGB, IHSW, CIV Regional Industrial Hygienist

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Industrial Hygiene Southwest Violation Inventory Log

LOG OF SCHEDULE OF CORRECTIVE ACTION - COMPLIANCE WITH SAFETY AND HEALTH STANDARDS Wenatchee Readiness Center (RC), Wenatchee, Washington

| CONTROL NUMBER | HAZARD DESCRIPTION | SITE | RAC | HAZARD COUNTERMEASURE | SUSPENSE | ACTION | Estimated Cost(s) | DATE CORRECTED | REFERENCES |
|------------------------|--|-----------------------|-----|---|----------|--------|----------------------|-------------------|-----------------------------------|
| WAWRC-070715- | Asbestos Survey not located | USARC RC Wenatchee | n | Locate the asbestos survey or contract with licensed firm to provide an asbestos survey. | | | | | 29 CFR 1910.1001([)(7) ((v) |
| 4.4-1-4.4-2 | WAWRC-070115- Asbestos awareness 4.4-1-4.4-2 training not performed | USARC RC Wenatchee | m | If asbestos-containing materials are identified and assessed, provide awareness training to maintenance personnel for the specific material types and locations of asbestos in this facility. | - | | | | 29 CFR 1910.1001(J)(7) (iv) |
| BEST AVAIL | The monthly and annual fire extinguisher inspections were not current. | USARC RC Wenatchee | e | Conduct the fire extinguisher monthly and annual inspections. | 240 | | | | 29 CFR 1910.157 |
| WAWRC-070715- | GFCI receptacles were not installed in the kitchen; nor were GFCI circuit breakers noted. | USARC RC Wenatchee | e | Install GFCI protection in kitchen. | | | | | NFPA 70 Art. 210.8 |
| WAWRC-070715- 4.113 | Exit signs are 15 year sealed units manufactured in 1993 and are overdue replacement. | USARC RC Wenatchee | 4 | Replace illuminated exit signs. | | | | | 29 CFR 1910.37(b)(6) |
| | There was no emergency lighting maintenance plan. | USARC RC Wenatchee | 4 . | Institute weekly emergency lighting inspections and ensure documentation is posted or kept with maintenance plan in the Safety Binder. | | | | | 29 CFR 1910.37 |

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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.

- 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)

- 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.

1. Background.

This document cites the OSHA Technical Manual (OTM), OSHA Instruction TED 01-00-015 [TED 1-0.15A]. This information supports OSHA's enforcement and outreach activities to assure safe and healthful working conditions for working men and women. The content is based on currently available research publications, OSHA standards, and consensus standards. The OTM is available to the public for use by other health and safety professionals, employers, and anyone involved in developing or implementing an effective workplace safety and health program.

The National Guard Bureau (NGB) Industrial Hygiene (IH) Program performed employee exposure assessments, reference Occupational Safety and Health Administrations (OSHA) 29 Code of Federal Regulation (CFR) 1910.1025(d)(2), to determine employees at Army National Guard (ARNG) Readiness Centers (RCs)/Armory exposures to airborne lead levels at or above the published standards. None of the air sampling studies found airborne levels at or above the action level (AL) or Permissible Exposure Limit (PEL) for lead, therefore the evaluation was considered a "Negative Initial Determination". Because of the negative initial determination as derived from these evaluations, the OSHA 29 CFR 1910.1025 requirements such as personal protective equipment (PPE), medical surveillance, showers/ change rooms, and engineering controls are not required, nor applicable.

However, all workplace surfaces must be maintained as free as practicable of accumulations of lead and other certain material (i.e. Cadmium, Cobait, and Chromates) particulate. The ARNG has adopted an acceptable surface lead level of 40 µg/ft² for areas considered to be administrative in nature within ARNG Facilities.

Evaluations or air sampling performed inside Indoor Firing Ranges (IFR's) during use is not included or discussed within this guide.

2. Controlling Lead Exposures: Work Practice Controls Guide (General Housekeeping and Routine Cleaning).

Work practices involve the way a task is performed. OSHA has found that appropriate work practices can be vital in lowering or eliminating worker exposures to hazardous substances and in achieving ongoing compliance with the PEL. Some fundamental and easily implemented work practices are:

- Good housekeeping. This includes areas not commonly accessed or elevated (i.e. tops of refrigerators, shelves, light fixtures, etc.)
- Use of appropriate personal hygiene practices
- Use of proper procedures and Personal Protective Equipment (PPE) to perform a task
- Provisions for proper supervision and annual validation to ensure control measures are effective

Note, personnel cleaning Indoor Firing Range (IFR) spaces/areas must follow the cleaning and PPE guidance published in NGR 385-15 and NG Pam 420-15, respectively.

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3. General Housekeeping.

Good housekeeping involves a regular schedule of cleaning activities to remove accumulations of lead particulate. The schedule should be adapted to the conditions and activities at each facility. However, these should occur at the minimum, weekly. RC/Armories with Indoor Firing Range (IFR) areas should be cleaned more than weekly – dependent on occupancy groups using facility.

There are two primary methods suggested by OSHA for controlling surface lead particulates, i.e. employing wet methods and the use of vacuum systems using High Efficiency Particulate Air (HEPA) filtration.

a. Floors. Any effective approved method that minimizes the likelihood of generating dusts within the facility environment may be used (for example, wet mopping, wet floor scrubber, disposable treated dust mop/broom head system, or HEPA Vacuum, etc.). Note, a proven method that is effective for entraining floor particulates during floor sweeping tasks is using a treated, spray-on cleaning solution increasing dust mop efficiency, Cotton Dust Mop, or a Microfiber Dust Mop. Examples and uses have been provided below.

| Type | Uses and Points to Consider |
|--|--|
| Cotton Dust Mop | Can be treated with cleaning solutions to attract more dirt |
| | Fibers collect dirt and particulates for removal form work areas |
| | Usually has replaceable pads that fit around a frame |
| | Available in both small, residential models and larger commercial ones |
| | Swiveling handle makes maneuvering easy |
| | Ideal for hardwood floors and other surfaces that can be scratched and dulled |
| | May be fitted with disposable heads for easy disposal into appropriate waste stream |
| Microfiber Dust Mop | Microfiber attracts a larger number of dirt and dust particles |
| | Microfiber cloths can usually be washed and reused a number of times |
| | May be fitted with disposable heads for easy disposal into appropriate waste stream |
| Poly-Vinyl Broom | Kitchens, hailways, bathrooms and other indoor areas |
| | Synthetic bristles are generally more flexible |
| Not recommanded for the control of particulates | Bristles that have split fibers capture finer particles |
| control or particulations | Broom heads with an angular cut get into corners more easily |
| Push Broom | . Large rectangular head ranges from 24" to 60" or more in width |
| 0194949509030 ED07-0 | · Good for sweeping out larger areas, such as workshop or garage floors |
| Not recommended for the control of perticulates | Larger broom heads are best for industrial or commercial applications |
| control or perocolettes | Look for a unit that allows the handle to be attached in either direction for more even bristle wear |
| Straw/Corn Broom | Natural bristles tend to be thick and rigid |
| and the second sec | Better for sweeping up large bits of dirt and debris |
| Not recommended for the control of particulates | Can be used indoors in kitchens, hallways and more |
| And the set Part restriction of | Ideal for sweeping off sidewalks, porches and other outdoor areas |
| Wet/Dry Broom | Usually has thicker bristles spaced farther apart |
| | Used to scrub floors as well as remove larger bits of debris |
| Not recommended for the control of particulates | Often designed for indoor and outdoor use |
| comparer of paroculates | Good on workshop, garage or basement floors |
| | · Can be made of natural materials, such as paimyra fibers, or synthetic |
| | materials, such as rubber |

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b. Horizontal Surfaces and fixtures, i.e. table tops, desks, book shelves, light fixtures, etc. Again, any effective approved method that minimizes the likelihood of generating dusts within the work environment is an acceptable practice. One proven method is to use a dampened or a wet cloth (i.e. wet methods - treated, spray-on cleaning/dusting solution to increase wiping efficiency, etc.), to capture the particulate and debris as described above.

c. Weapons Cleaning Activities. Generally, the recommendations for weapons cleaning is that these activities be conducted exterior to the facility, or within limited areas, to minimize migration of lead particulate, or other metal particulates, throughout the facility. In most instances the unit mission requirements do not always afford them this opportunity and weapons cleaning is conducted within the RC/Armory Drill Hall areas. If weapons cleaning is conducted within the facility the following is recommended.

- Do not allow weapons to be cleaned or stored within food preparation or food storage areas.
- Ensure personnel clean-up area(s) and tables after each weapons cleaning activity using the
 prescribed wet methods.
- Tables and/or desks used for weapons cleaning should be permanently marked, "For Weapons Cleaning Only," when utilized as such.
 - Tables and desks used for weapons cleaning should not be utilized for other activities or functions conducted within the facility.

d. A technique to clean large areas is to start by cleaning the farthest rooms/areas away from the main entrances and work towards the entrances/exits. This will minimize particulate migration from 'dirty' rooms, or areas, and will reduce the potential for cleaning personnel reintroduction of particulates/debris to the areas previously cleaned.

e. Local and facility conditions will determine the frequency to change/replace Mop/Broom Heads, Cloths, and rinse water used for cleaning. It's important to rinse, change, and replace frequently and regularly to prevent particulate/debris transfer to other areas of the facility.

f. Personnel conducting Housekeeping activities outlined should read and understand the requirements within this guide and be briefed and follow the Hazard Assessment (HA): ARNG General Housekeeping Guide, Control of Metal Particulates, i.e. Lead (pb), dated 15 NOV 15, included within Appendix A.

g. Avoid blowing, shaking or like actions that could potentially generate dusts. Dry sweeping, dusting, wiping or blowing with compressed air is not be permitted.

h. If treated dust mop method is used - -Do Not Shake Mop head - - have mop head laundered after use or dispose of if disposable type. Always keep used dust mop heads in sealed double plastic bags when stored at RC/Armory. Shaking of mop head could release unwanted contaminants into RC/Armory areas.

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4. Personal Hygiene Practices. Personal hygiene is an important element to protect the employee/workers/yourself from exposures to lead particulate. One most commonly overlooked route of entry to the body is through ingestion. You can also absorb lead through your digestive system if lead gets into your mouth and is swallowed. If you handle food, cigarettes, chewing tobacco, or make-up which may have lead on them, or handle them with hands contaminated with lead, this will contribute to an ingestion hazard. Observing the following simple techniques will reduce the potentials to ingestion hazards.

- During cleaning activities follow the recommended guidelines outlined within the attached IHSW Hazard Assessment - ARNG Readiness Centers (RC) / Armory General Housekeeping - Control of Metal Particulate - Lead (pb)
- Frequently wash face and hands
- Wash hands and faces prior to eating, drinking, using tobacco products, or applying cosmetics
- Ensure activities that generate lead particulate, i.e. weapons cleaning, Indoor Firing Ranges (IFR's), and maintenance activities are positively segregated from food preparation, eating, and non-ARNG group events/activities
- Facilities that contain IFR's follow additional preventive countermeasures and guidelines to reduce/eliminate lead migration into the non-IFR areas of the facility. These guidelines have been developed to ensure occupant health and facility serviceability and must be followed until appropriate remediation/treatment/disposition of these areas have been completed
- Ensure co-located activities, i.e. vehicle/equipment maintenance, remain outside, or segregated from the administrative/common areas of the facility
 - Some evaluations have returned with elevated lead levels within Workout Rooms/Gyms as a result from personnel wearing coveralls/work cloths into these areas without changing into an appropriate/designated workout/PT uniform or clothing

5. Waste Disposal. Personnel must properly dispose of any wastes generated by these process within an appropriate waste stream. Ensure prior consultation with the State ARNG Environmental Directorate to properly identify and follow any State or local laws and guidelines. Some RC/Armories are near, or collocated with a maintenance facility (FMS, CSMS, UTES, etc.) that have an established waste stream and can easily be used to dispose of wastes and storage as necessary.

6. Associated Equipment. The following list does not imply the ARNG endorsement of any product, nor does it imply mandatory use. It is simply a list of products recommended and each facility should be able to locate a compatible substitute. Also, this list is not intended to be all inclusive. There may be other items required at the facility that are not prescribed below.

- Cloth Mop head (s) & Mop head holder(s) with handle
- Mop bucket(s) with wringer

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- Clean cotton rags and/or sponges
- Disposable gloves
- Large barrel (55 gal.) to store wastewater after changing out the dirty scrub water, multiple waste water containers may be needed/required
- Disposable overshoes or rubber boots, if applicable
- HEPA vacuum and associated filters, etc., if applicable
 - Extension cords
- Plastic bags to dispose of waste, preferably 3.0 mil or greater in thickness
- Detergent (surfactant), e.g., Spic-N-Span, Mr. Clean, etc. Ensure to consult Product Safety Data Sheet (SDS) to ensure appropriate precautions are taken
- Spray-on cleaning solution, i.e. Pledge Spray, Aerosol Dust Mop Treatment, etc. Ensure to consult Product Safety Data Sheet to ensure appropriate precautions are utilized
- Disposable Dust Mop/Broom Head, i.e. Mop in a Box (ULine) can be cut to desired lengths
- Microfiber Dust Mops

7. Performance of Task. There are many laws and regulatory guidelines emphasizing lead, lead exposures, and various activities as it relates to lead. Because of this, the occupancies who reside within, conduct housekeeping activities, and perform maintenance and repair activities should be trained/briefed on the precautions they need to take, including Personal Protective Equipment (PPE) required if necessary, to ensure their health and to continually maintain a serviceable facility. The following are provided as the most common laws, guidelines, and tools available outlining some of the requirements and is not all inclusive. It is important to consult all local laws and guidelines to ensure regulatory compliance and occupant health.

- Department of Defense Instruction (DODI) 6055.01, Appendix to Enclosure 4 Appendix to Enclosure 4 Implementing Guidance for Controlling Surface Contamination in Operations Using Lead, Hexavalent Chromium, and Cadmium, dated 14 OCT 2014
- 29 CFR 1910.1200 Hazard Communication Program
- 29 CFR 1910.1025 Lead
- 29 CFR 1910.132(d) Hazard Assessment and Equipment Selection
- 29 CFR 1910.132 Subpart I, Personnel Protective Equipment and General Requirements

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 Hazard Assessment (HA): IHSW ARNG Readiness Centers and Armory General Housekeeping Lead, dated 15 NOV 15, reference Appendix A.

8. Post Housekeeping Activities.

 Housekeeping personnel should thoroughly wash hands, face, and areas that may have been affected during these tasks

- Properly dispose of waste materials and water in an appropriate waste stream.

9. Supervision. Good supervision is another important work practice that ensures proper work practices are followed. To ensure control measures are effective and the housekeeping practices adequately control lead particulate within RC/Armory, it is important for the State Industrial Hygiene Technician complete annual wipe sampling to verify.

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IH HAZARD ASSESSMENT IHSW ARNG

ARNG General Housekeeping Guide Control of Metal Particulates, i.e. Lead (pb) (15 NOV 15)

LOCATION: ARNG Readiness (RC's)/Armory and other like Facilities

DEVELOPED FROM: Multiple Industrial Hygiene Site Assistance Visits (IHSAV's)/Evaluations, initial dated May 1-4, 2014

GENERAL DESCRIPTION: Traditional Guardsman and other ARNG personnel perform general housekeeping/cleaning activities/responsibilities throughout the facility. Personnel use an effective approved method that minimizes the likelihood of generating dusts within the facility environment (for example, a wet mopping, wet floor scrubber, disposable treated dust mop/broom head system, wet cloth/towelettes, or HEPA Vacuum Systems). Note, a proven method that is effective for entraining floor particulates during floor sweeping activities is to treat (application of a cleaning solution) dust mop heads increasing collection efficiency, i.e. Cotton Dust Mop, or a Microfiber Dust Mop. Personnel may use wet-cloths or towelettes to clean fixtures, desks, tables, etc.

To ensure lead containing debris and waste is properly removed from facility all waste generated during cleaning activities should be disposed of through the appropriate waste stream. This Hazard Assessment (HA) has been prepared for operations under normal conditions.

HAZARDS OBSERVED:

- Lead particulate on horizontal surfaces, floors, fixtures (desks), cabinet tops, etc. within facility
- Lead particulate inside cabinets, lockers, etc.
- Personnel using ladders, step stools, etc. to access areas difficult to reach
- Potential slips and falls from wet floor surfaces when wet methods are employed
- It is important to consult cleaning solution Safety Data Sheets (SDS) to ensure proper PPE and applications are followed

PERSONAL PROTECTIVE EQUIPMENT (PPE) Required:

- Mand Protection: Disposable type gloves, dispose through appropriate waste stream
- Torso Protection: None Required under normal conditions
- Eve Protection: None Required under normal conditions
- Foot Protection: None required under normal conditions
- Head Protection: None Required under normal conditions
- Respiratory Protection: None Required. Personal conducting these processes must employ the wet methods, or appropriate vacuum systems, as outlined within the accompanying ARNG General Housekeeping Guide
- Mearing Protection: None Required under normal conditions

PRIMARY PROCESS HAZARDOUS MATERIALS:

| Product name | NSN | CAS |
|-------------------|----------------------|----------------------|
| Lead (pb) | N/A | 7439-92-1 |
| Cleaning Solution | TBD by Local Command | TBD by local Command |

TBD = To Be Determined IAW with local policies, practices, and products authorized for use

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 IH HAZARD
 ARNG General Housekeeping Guide

 ASSESSMENT
 Control of Metal Particulates, i.e. Lead (pb)

 IHSW ARNG
 (15 NOV 15)

MEDICAL SURVEILLANCE REQUIRED:

None required. However, it is important for consultation with the State Occupational Health Manager to determine/confirm appropriate medical surveillance requirements

OTHER OBSERVATIONS/REQUIREMENTS:

 Use of Vacuum Systems (HEPA) may require additional training and maintenance IAW State and Local Laws and the manufactures recommendations/requirements

 Recommend personnel involved with cleaning activities are briefed/trained with hazards associated with this process, protective equipment use and limitations, and protective measures they need to take to ensure their health (reference 29 Code of Federal Regulations (CFR) 1910.1025, Appendix A as a guide)

HAZARD ASSESSMENT EVALUATIONS:

Date of last assessment: May 2014

Date anticipated for next assessment May 2015

NOTE: Reassessment may not be needed until a change in operation occurs (i.e., chemical change/use, new location, new equipment, etc.)

| IHSW Staff | /////////////////////////////////////// | | 15 NOV 1 |
|--------------------------|---|------------------|----------|
| Print Name | Signature | Preparation Date | |
| (916) 854-1490 | 10510 Superfortress Ave, Mathe | er, CA 95655 | - |
| Contact Phone Number | Contact Addres | s | |
| State Occupational Healt | th Manager Review: | | |
| | | | |
| Print Nome | Signature | Review Date | |
| Contact Phone Number | Contact Address | \$ | |
| State Safety (SOHM) Rev | iew: | | |
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| Contact Phone Number | Contact Addres | 5 | |
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IH HAZARD ARNG General Housekeeping Guide ASSESSMENT Control of Metal Particulates, i.e. Lead (pb) IHSW ARNG (15 NOV 15)

Supervisor:

Print Name

Signature

Review Date

Employees:

| Print Name | Signature | Date Briefed with Process Hazards |
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Employee Briefing/Training Roster continued on next page

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IH HAZARD ASSESSMENT IHSW ARNG

ARNG General Housekeeping Guide Control of Metal Particulates, i.e. Lead (pb) (15 NOV 15)

| Print Name | Signature | Date Briefed with Process Hazards |
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INDUSTRIAL HYGIENE SITE ASSISTANCE VISIT (IHSAV)

Converted Indoor Firing Range 1230 Fifth Street Wenatchee, WA 98801

October 8, 2014

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.IH1716.38

Prepared by:

Industrial Hygiene Specialist

Reviewed by:



Senior Industrial Hygienist

Principle-In-Charge

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NES. Inc. NES Job Number: 013.1H1716.38

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- B Assessment Criteria
- C Photo Log
- D Chemical Inventory
- E Floor Plan/Illumination Survey/IAQ Temp, RH, CO, & CO₂
- F Ventilation Data
- G Field Notes
- H Calibration Certificates
- I Air Sampling & Metal/Lead Wipe Tables
- J Laboratory Reports
- K Employee List
- L IHSW Violation Inventory Log
- M Hazard Assessments
- N Recommendations
- O DD Forms 2214
- P Installation Status Report
- Q Facility Information
- R Safety Related Information
- S Noise Dosimetry Data
- T Additional Supporting Documentation

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NES, Inc. NES Job Number: 013.1H1716.38

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EXECUTIVE SUMMARY

On October 8, 2014, Certified Industrial Hygienist (CIH), and industrial Hygiene Specialist, both with Network Environmental Systems, Inc. (*NES*), conducted an Industrial Hygiene Site Assistance Visit (IHSAV) at the converted Indoor Firing Range (IFR) located at 1230 Fifth Street in Wenatchee, Washington. The primary point of contact (POC) for information gathered during this survey was who may be reached by phone at (253) 912-3180 or by email at

The objectives of this IHSAV were to:

- Obtain historical information regarding the conversion of the IFR;
- Inspect & assess the converted IFR space & HVAC system;
- Collect metal surface wipe samples;
- Measure illumination levels;
- Collect indoor air quality data;
- Evaluate existing safety hazards;
- · Inspect & evaluate the paint booth operation and systems (if present); and
- Evaluate the facility for potential asbestos, lead, and mold hazards.

Significant findings for this IHSAV can be found in the Industrial Hygiene Southwest (IHSW) – 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 methodologies, results, findings, regulatory requirements, and recommendations. Appendices may be left blank where information has been requested from the facility and not yet received.

Commendables: deserve accolades for assisting with this IHSAV made introductions to site personnel. Was cooperative with questions asked, knowledgeable in site work processes, and provided assistance obtaining information. The details within this report are a direct result of the assistance provided by

IHSAV Converted Indoor Firing Range Posted to MOBIPOR Reading Room May, 2018 Page 1 of 13

NES, Inc. NES Job Number: 013.1H1716.38

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1.0 INTRODUCTION

On October 8, 2014, CIH, and CIH, and Industrial Hygiene Specialist, both with *NES*, conducted an IHSAV at the converted IFR located at 1230 Fifth Street in Wenatchee, Washington. The primary POC for information gathered during this survey was who may be reached by phone at (253) 912-3180 or by email at

1.1 Objectives

The primary objective of the IHSAV was to evaluate the occupational environment of the areas within the Wenatchee converted IFR in order to determine the presence of health and safety risks. 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. This IHSAV will serve to establish a baseline Hazard Assessment (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:

- Obtain historical information regarding the conversion of the IFR;
- Inspect & assess the converted IFR space & HVAC system;
- · Collect metal surface wipe samples;
- Measure illumination levels;
- Collect indoor air quality data;
- · Evaluate existing safety hazards;
- · Inspect & evaluate the paint booth operation and systems (if present); and
- Evaluate the facility for potential asbestos, lead, and mold hazards.

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2.0 PROCESS DESCRIPTION

The Wenatchee converted IFR was located within the Wenatchee Armory facility. The Armory contained a myriad of offices used for administrative support purposes. The building was constructed in the 1950's and contained a formerly active IFR used by National Guard personnel. The IFR was reportedly converted in 2004-2005, but there was no documentation of the conversion or when the converted IFR was updated to the current configuration. Personnel on-site did not know whether asbestos was present, inspected, or abated during the renovations. There were no records (building material survey or Asbestos Hazard Management Plan) available on-site.

The converted IFR space consisted of the following: storage cages, lockers, and an exercise area. No personnel work full time within the converted IFR space, but personnel from the B1-161 81st ABCT use the exercise area and M-Day soldiers use the storage cages, lockers, and exercise area. It was reported that weapons were cleaned on the Armory drill floor and in the converted IFR by M-Day soldiers. The public does not access the space.

NES observed the IFR's exterior walls, or shell, which were composed of concrete. The east end walls and ceiling were covered with acoustical tiles. The acoustical tiles had been removed from the remaining walls and ceiling for unknown reasons, and did not appear to have been present in the bullet trap area. The exposed concrete walls and acoustical tiles were painted. The concrete floor near the boiler room door, on the east end appeared to have been painted at one time as there was paint wearing away from this area. It is unknown when the different layers of paint were applied and if they were historical to the IFR (e.g. they were present when the IFR was active). The ventilation system was still intact and the ducting had been painted. However, the system was not operational.

NES identified building components that were likely in place while the IFR was active (e.g. historical building components), including: the concrete shell (e.g. walls and floor), acoustical wall / ceiling tiles, and the ventilation system including a return vent.

NES observed records indicating one (1) previous IHSAV had been conducted at the Wenatchee Armory on 3 March 2010 by Cole & Associates Training & Consulting, Inc. *NES* was provided with a copy of the full report and conducted a cursory review of the Violation Inventory Log for the previous IHSAV conducted. One (1) issue was identified within the report; lead concentrations were found to exceed established criteria in the converted IFR.

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3.0 METHODS

NES assessed multiple conditions and operations using quantitative means. The methods used to conduct these assessments are detailed in this section. Results of these assessments are detailed in Section 4.0.

3.1 Indoor Air Quality

Carbon dioxide (CO₂) 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 during respiration. The American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), in their Standard 62.1-2013, *Ventilation for Acceptable Air Quality*, recommend maintaining CO₂ below a concentration that is 700 parts per million (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).

Temperature is commonly measured during IAQ assessments to determine comfort of occupants. According to ASHRAE, in their standard 55-2010, *Thermal Environmental Conditions for Human Occupancy*, indoor temperatures are recommended to range 68-74° Fahrenheit (F) during the winter and 73-79 °F in the summer. Relative humidity indicates the amount of moisture in the air. ASHRAE in their Standard 62.1-2013, recommends maintaining humidity levels below 65%.

Carbon dioxide, temperature, and relative humidity were measured using a Gray Wolf IAQ Meter, model IQ-410. A copy of the current annual calibration certificate for this instrument is located in Appendix H.

3.2 Air Monitoring - Carbon Monoxide

Carbon monoxide is a colorless, odorless, poisonous gas. It is produced by the incomplete burning of solid, liquid, and gaseous fuels. Appliances fueled with natural gas, liquefied petroleum (LP gas), oil, kerosene, coal, or wood may produce CO. Through the use of ventilation, it is uncommon to find elevated concentrations of CO indoors. The health effects of CO depend on the concentration of CO and length of exposure, as well as each individual's health condition. The concentration of CO is measured in ppm. Health effects from exposure to CO levels of approximately 1 to 70 ppm are uncertain, but most people will not experience any symptoms. Air monitoring for carbon monoxide (CO) was performed

Page 4 of 13 BEST AVAILABLE COPY throughout the facility using a Gray Wolf IAQ Meter, model IQ-410. A copy of the annual calibration certificate for this instrument is located in Appendix H.

3.3 Metal Wipe Sampling

Lead dust may be introduced into a facility from work processes, facility finishes, consumer products, or other sources. In facilities with converted IFRs, residual lead contamination may be present as a result of insufficient decontamination prior to conversion. Lead wipe samples were collected from horizontal surfaces in various locations throughout the converted IFR to evaluate the potential presence of lead-contaminated dust and provide insight as to whether the space may have been decontaminated prior to being re-purposed.

Ghost Wipe[™] brand wipes were used to wipe 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

Based on the age of most National Guard facilities, it is possible that lead paint could be present on walls and other surfaces. If kept intact, the potential hazard of lead paint is minor. Paint that is peeling or otherwise degraded could potentially result in lead-contaminated dust and increases the risk of exposure. Thus, an identification and assessment of deteriorating paint was conducted as part of this IHSAV.

Peeling paint was identified on the south wall of the converted IFR. A paint chip sample was collected and submitted to ALS, located in Salt Lake City, Utah to be analyzed for lead in accordance with NIOSH Method 7300 modified method.

3.5 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

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 930 of 980 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.

3.6 Equipment Used

The following equipment was used for this survey:

| Туре | Model Number | Serial Number | Calibration Date |
|----------------------------|--------------|---------------|------------------|
| Gray Wolf IAQ Meter | IQ-410 | 01-936 | 22 January 2014 |
| Konica Minolta Light Meter | TL-I | 90480719 | 2 June 2014 |

Please see Appendix H for a complete inventory of calibration certificates of equipment 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:

- Using appropriately educated & experienced staff who receive continuing education;
- Documentation of pertinent field and sampling information;
- Peer review of sampling strategy, field methods, calculations, and reports;
- Strict adherence to documented method requirements, in particular to NIOSH & OSHA methods, & 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;
- Calibration of instruments, including field calibration via manufacturers' recommended procedures and routine (typically annual) off-site calibration of equipment via certified third parties.

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4.0 SAMPLING RESULTS

4.1 Indoor Air Quality

The converted IFR space did not have any form of mechanical ventilation or temperature and humidity control measures in place. The outdoor CO_2 concentration was measured to be 525 ppm; therefore, the maximum indoor CO_2 concentration recommended by ASHRAE was 1,225 ppm. The CO_2 concentrations from inside the converted IFR ranged between 568 and 580 ppm. The areas measured were within the ASHRAE recommended range for CO_2 .

ASHRAE recommends maintaining temperatures between 68 and 79°F and relative humidity below 65% to minimize the potential for growth of allergenic or pathogenic organisms. Temperatures inside the building ranged between 73 and 74°F. Relative humidity measured at 41% consistently. The areas measured were within the ASHRAE recommended ranges for temperature and relative humidity.

A table of the sample locations and summary of corresponding IAQ measurements is available in Appendix E of this report.

4.2 Air Monitoring – Carbon Monoxide

Carbon monoxide concentrations were measured at a total of two (2) locations throughout the converted IFR using a Gray Wolf IAQ Meter, model IQ-410. The concentration of CO inside the facility measured at 0.1 ppm consistently, below the outdoor background concentration measured. These concentrations are also below the exposure limit ceiling of 200 ppm set forth by OSHA. A summary of CO measurements collected is provided in Appendix E.

4.3 Metal Wipe Sampling

Wipe samples for lead dust were collected from horizontal surfaces in selected areas of the Wenatchee converted IFR facility to determine if lead contamination was present from the former IFR. Samples were collected from building materials believed to be installed during the renovation of the IFR and from building components that could have been present when the IFR was active (concrete shell – walls / ceiling / floor, acoustical tiles, and metal frames over/in ventilation openings).

The Departments of the Army and the Air Force have established NG Pam 420-15, "Guidelines and Procedures for Rehabilitation and Conversion of Indoor Firing Ranges" that established a standard for acceptable lead concentrations on surfaces within a converted IFR to consider it to be "free of lead dust". NG Pam 420-15 sets a clearance criteria of 200 micrograms per square foot (μ g/ft²) for surfaces within the converted IFR (40 μ g/ft² if the

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 932 of 980 converted space will have children present). All surfaces sampled during this IHSAV were compared to the 200 μ g/ft² criteria as it is not expected that children will be present in the converted IFR space.

A total of eight (8) lead wipe samples were collected during the IHSAV to be analyzed in accordance with NIOSH Method 7300, modified for Ghost WipesTM. Samples were collected from the following locations: converted IFR floor and wall, acoustic tile, a desktop, HVAC supply diffuser, ducting and return vent. Photographs were taken of each sampling location and are presented in Appendix C (Photo Log). The analytical results are summarized in Table 1. Laboratory results are attached in Appendix J.

| Sample Number | nple Number Sample Surface Sample Location | | Results (µg/ft ²) | ARNG Standard (µg/ft ²) | |
|----------------|--|---|----------------------------------|---|--|
| 100814-WIFR-01 | Painted concrete floor | Converted IFR, east end | 31 | 200 | |
| 100814-WIFR-02 | Acoustic Tile | Converted IFR, south wall on east end | 6.6 | 200 | |
| 100814-WIFR-03 | Desktop | Converted IFR, east end | 9.8 | 200 | |
| 100814-WIFR-04 | Top of HVAC supply diffuser | Converted IFR, east end | 950 | 200 | |
| 100814-WIFR-05 | Inside HVAC supply ducting | Converted IFR, east end | 8,400 | 200 | |
| 100814-WIFR-06 | Discolored wall | colored wall Converted IFR, north wall | | 200 | |
| 100814-WIFR-07 | Exercise area | Converted IFR, west end floor | 20 | 200 | |
| 100814-WIFR-08 | HVAC return vent | Converted IFR, west end | 1,300 | 200 | |

| 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 that three (3) of the sampled surfaces present within the converted IFR had lead contamination/dust present at concentrations exceeding the established criteria. Surfaces found to exceed the criteria include: the top of the HVAC supply diffuser, the inside of the HVAC supply ducting and the HVAC return vent on the west end of the converted IFR. It is believed that the elevated lead concentrations were found on historical building components. Sample results indicate that the IFR was not fully decontaminated prior to being converted.

IHSAV Posted to NGB FOIA Reading Room May, 2018 Page 8 of 13 BEST AVAILABLE COPY NES, Inc. NES Job Number: 013.IH1716.38 FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 933 of 980 The items found to exceed the established criteria should be cleaned and remediated to prevent potential lead exposure for employees working in the converted IFR space. A remediation work plan should be developed to control potential employee exposures during remediation and to prevent inadvertent spreading of lead dust from within the converted IFR to outside areas. Follow-up sampling should be conducted following remediation efforts to evaluate whether cleaning was sufficient.

4.4 Painted Surface Evaluation

A total of one (1) paint chip sample was collected at the Wenatchee converted IFR to be analyzed for lead in accordance with NIOSH 7300. The analytical results are summarized in Table 2. Detailed laboratory results are included in Appendix J.

| Table 2: Bulk | paint chi | p sample | e results |
|---------------|-----------|----------|-----------|
|---------------|-----------|----------|-----------|

| Sample Number | Sample Location/Description | Results (%) of Lead | EPA/HUD Standard |
|------------------|---|------------------------|---------------------|
| 100814-WIFR-B-01 | South Wall of the Converted IFR, Concrete Wall (white) | 0.095 | ≤ 0.5% |

The analytical results indicate that the paint chip sample contained 0.095% lead by weight and was below the EPA/HUD criteria for lead based paint determination. No further action is necessary at this time.

4.5 Illumination Level Monitoring

Illumination levels were measured throughout the areas of the converted IFR. 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.

Lighting measurements were collected in a total of two (2) locations. Based on the measurements collected in comparison to the above criteria, lighting was insufficient on the east end of the converted IFR. Lighting levels at the east end did not provide the minimum amount of light required for a walking surface. See Appendix E for a summary of illumination measurements.

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5.0 FACILITY SYSTEMS & HAZARDS

5.1 Facility/Building HVAC System

An evaluation of the heating, ventilation, and air-conditioning (HVAC) systems that serve the converted IFR was conducted. This evaluation consisted of a visual inspection of the system. The converted IFR had an HVAC system in place but it was non-operational. An uncovered duct opening was present in the ceiling of the west end of the converted IFR. The HVAC system was presumably left over from the original IFR ventilation system. There were no mechanical means to provide ventilation or fresh air. Additionally no systems were in place to control temperature or humidity levels within the space.

5.2 Water Damage and Limited Fungal Growth Evaluation

The interior of the facility was visually inspected for water damage and subsequent fungal growth resulting from moisture. There were no visual signs of fungal growth, active or former water intrusion observed during this IHSAV.

5.3 Asbestos Evaluation

Personnel on-site did not know whether asbestos was present, inspected, or abated during the renovations of the IFR. A cursory evaluation of the converted IFR interior spaces was made to identify the presence of building materials suspected to contain asbestos. Building materials suspected to contain asbestos were identified during the IHSAV, but there was no asbestos survey report and/or Asbestos Hazard Management Plan available on-site. Suspect building materials identified in the converted IFR included: acoustical tiles, acoustical tile mastic, and concrete (walls/ceiling/floor).

No bulk samples were collected during this IHSAV due to variability in State regulations regarding certification and sampling requirements. Having asbestos-containing materials (ACM) in a building does not constitute a hazard in of itself. However, if the ACM is or were to become damaged, asbestos fibers could be released and made airborne, which could result in potential exposure to asbestos fibers. Thus, ACM should be managed in a manner to protect them from becoming damaged.

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6.0 OBSERVATIONS AND QUALITATIVE ASSESSMENTS

NES assessed multiple conditions and operations using qualitative means and observations. Our methods and findings of qualitative assessments made are detailed in this section.

6.1 Observations of Converted IFR

NES visually inspected the concerted IFR space. The converted IFR had not been divided into separate rooms; rather it was still an open space. The space was in good condition, but *NES* observed mild to moderate dust accumulation atop lockers and exercise equipment around the converted IFR. The fluorescent lighting and a second door on the southwest side appeared to be installed after the IFR had been converted, but there were no historical records to confirm this.

Items suspected to be historical to the IFR include the acoustic tiles, HVAC system and concrete ceiling, walls and floor.

6.2 Contract (Non-DoD) Operations

No contract (Non-DoD) operations were performed at this facility.

6.3 Safety Walk-Through

NES conducted a walk-through of the converted IFR to identify existing conditions and whether safety hazards or regulatory deficiencies were present. Some of the conditions observed were documented in photographs, attached in Appendix C (Photo Log).

 The fire extinguisher was missing a tag and documentation of monthly inspections and annual servicing.

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7.0 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.

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8.0 PROJECT APPROVAL

This IHSAV was reviewed and approved by:

Senior Industrial Hygienist

April 21, 2015 Date

April 24, 2015 Date

Principle-In-Charge

Technical Assistance: For technical assistance regarding information found in this report or the performed survey; please contact *NES* at 916-353-2360 or the Southwest Regional Industrial Hygiene Office, 916-854-1491. 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.

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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), Various

American National Standards Institute, Z358. 1-2009. 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

AR 420-1, Army Facilities Management

ARNG "Maintenance Shop Local Exhaust Ventilation Measurements", issued by Mr. Kenneth A Forsythe III, Dated 14Nov2013,

American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE), Various

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.

MIL-STD-1472E, Illumination Level Standard

NGR 385-15, National Guard Bureau, Policy and Responsibilities for Inspection, Evaluation and Operation of Army National Guard Indoor Firing Ranges, 3NOV2006

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

TB MED 503, The Army Industrial Hygiene Program

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

Title 40, Code of Federal Regulations (CFR), Protection of Environment, Part 262, Standards Applicable to Generators of Hazardous Waste.

TM 5-810-1, Department of the Army, Heating, Ventilating, and Air Conditioning, 15 June 1991

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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), Various

American National Standards Institute, Z358. 1-2009. Emergency Eyewash and Shower Equipment

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

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DA PAM 40-501, Hearing Conservation.

MIL-STD-1472E, Illumination Level Standard

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- Title 29, Code of Federal Regulations (CFR), 2011, revision Part 1910, Occupational Safety and Health Standards
- Title 40, Code of Federal Regulations (CFR), Protection of Environment, Part 262, Standards Applicable to Generators of Hazardous Waste.
- TM 5-810-1, Department of the Army, Heating, Ventilating, and Air Conditioning, 15 June 1991

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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).

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PHOTO LOG WENATCHEE CONVERTED IFR WENATCHEE, WA OCTOBER 8, 2014



Photo 1: Wenatchee Armory exterior, view to north

Photo 2: Facility signage located to the southeast of the building



Photo 3: View to the southeast of the converted IFR and Armory facility

Photo 4: Newly built storage building to the north of the Armory facility

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Photo Log Wenatchee Converted IFR Wenatchee, WA October 8, 2014



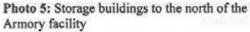




Photo 6: Interior of converted IFR, view to southwest



Photo 7: View to the west of storage lockers, exercise area and newly installed fluorescent lighting

Photo 8: Exercise equipment area on the west end of the converted IFR

Page 2 of 6 BEST AVAILABLE COPY

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 946 of 980

PHOTO LOG WENATCHEE CONVERTED IFR WENATCHEE, WA OCTOBER 8, 2014



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Photo 9: Historical concrete floor and sound dampening panels on the northeast walls and ceiling of the converted IFR; door to the boiler room



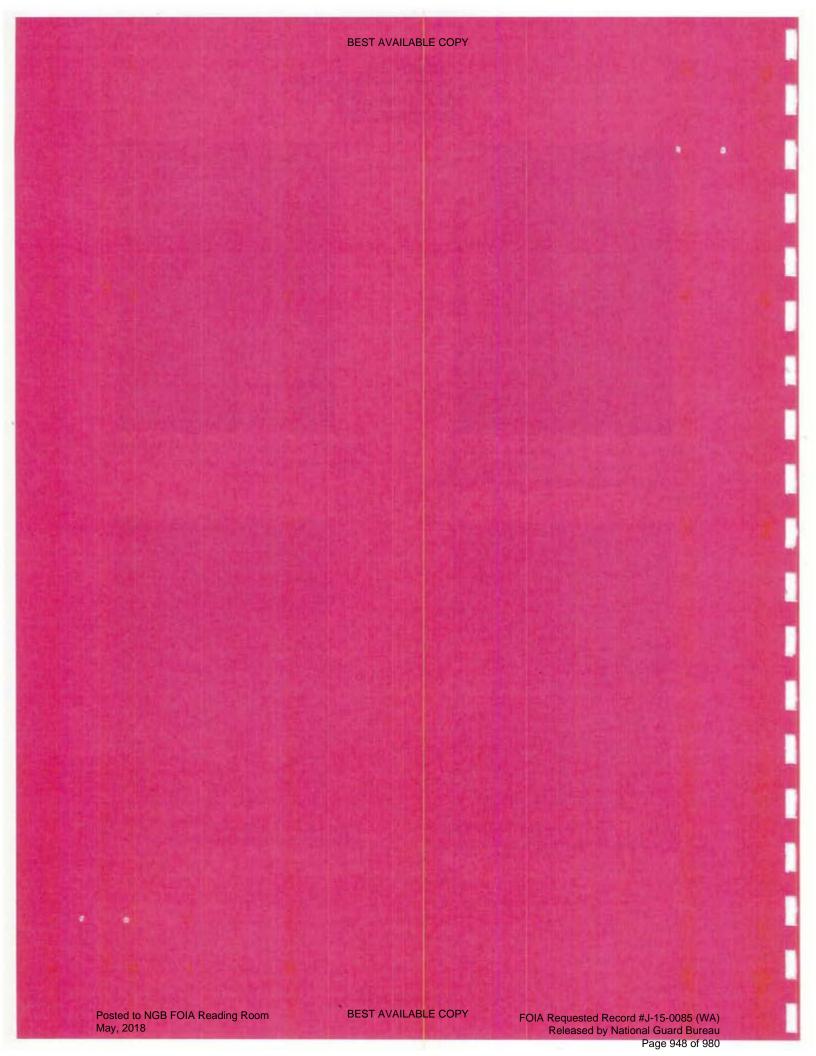
Photo 11: Paint chip sample 100814-WIFR-B-01 collected from the south concrete wall.

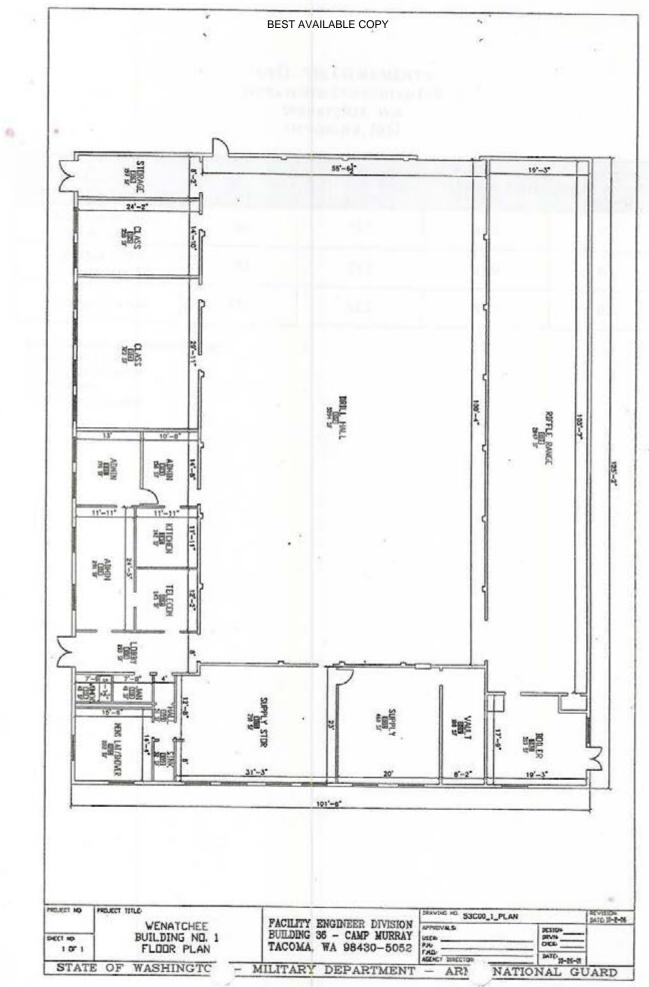


Photo 10: Historical HVAC system and supply diffuser with newly painted ducting



Photo 12: Lead wipe sample 100814-WIFR-01 collected from east end painted concrete floor





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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 949 of 980

ILLUMINATION SURVEY WENATCHEE CONVERTED IFR WENATCHEE, WA OCTOBER 8, 2014

| Room | Location | Light Measurement (FC) | Minimum Lighting Requirement (FC) |
|----------------------------|------------------------|---------------------------|--------------------------------------|
| Converted IFR, West end | Center of weight room | 76.2 | 30 |
| Converted IFR, East end | Center of storage cage | 7.5 | 10 |

*FC = foot candle measurement

Bold = Insufficient Lighting



Industria vygiene Site Assessment Vie (IHSAV) Scope of Work (Checklist) Revised: May 14, 2014



| 1 | Done | Task | | | | | | | |
|----|--------------|---|--|--|--|--|--|--|--|
| | ~ | Review File: Past IHSAV Reports (determine additional tasks to be completed) & completed forms | | | | | | | |
| | / | Opening Conference: intro, IHSAV summary, ID POC's, review Facility Work Activities, ID Non-DoD Contractors (o/w separator, laundry, tools, pest control, rags, haz waste, refuse, crane maint., etc.), & discuss civilian activities performed onsite (use of dril floor or other facilities). Obtain/Review Pervious IH Assessments | | | | | | | |
| 0 | ~ | Complete Facility Information Form See Armory | | | | | | | |
| | ~ | Record Adjacent Properties (North, South, East, West) See Armory | | | | | | | |
| | NA | Safety Program/ SOP/ Safety Training Review: review safety programs, list those present & date of most recent revision, training records, topics covered and date of most recent training | | | | | | | |
| | NA | Conduct Personal Breathing Zone Sampling; record data in Exposure Sample Data Sheets | | | | | | | |
| Ð | \checkmark | Collect IAQ and lighting measurements (+ outdoor control), record data on IAQ & Illumination Measurement Form | | | | | | | |
| D | \checkmark | Collect metal wipe samples; record data on Wipe Sampling Summary Form | | | | | | | |
| | MA | Identify Exhaust Ventilation systems & collect measurements; record data on LEV System Survey Form | | | | | | | |
| | NA | Identify Noise Hazardous areas & collect sound level measurements; complete DD 2214 Noise Survey Form | | | | | | | |
| | Mart - | Develop list of IH equipment used during IHSAV; record data on Equipment List Form | | | | | | | |
| | MA | Asbestos Survey: identify whether facility has Asbestos Inspection Report, list suspect building materials present within facility; identify damaged suspect materials (take pictures) | | | | | | | |
| | MA | Lead Paint Survey: identify whether facility has deteriorating paint, list areas & substrate where deterioration is occurring (take pictures), & collect bulk samples were paint is not adhered to substrate | | | | | | | |
| | NA | Mold Survey: identify evidence of moisture intrusion (take pictures), identify any historic water intrusion / mold issues, identify presence or lack thereof mold growth | | | | | | | |
| | MA | HVAC / Facility Ventilation Survey: conduct a general assessment of HVAC / facility ventilation system, define how fresh air is provided, & develop written summary | | | | | | | |
| | MA | HAZMAT Inventory & Storage: obtain chemical inventory & evaluate areas where chemicals are stored | | | | | | | |
| | NA | POL Handling & Storage: evaluate how POL is handled & stored | | | | | | | |
| | NA | General & Tool Supply Area (If Present): evaluate general condition of tool & supply areas | | | | | | | |
| | ~ | Safety Walkthrough: Conduct a walk of the entire facility & document conditions, violations & findings; record data on General Safety Compliance Assessment Form | | | | | | | |
| DI | \checkmark | Complete Photo Log: including front / back of facility, sample locations & all conditions observed | | | | | | | |
| Ī | Yes | Converted IFR: Verify that historically an IFR was not present, if present conduct applicable lead samples. | | | | | | | |
| Ī | MA | Paint Booth: complete the paint booth evaluation checklist & conduct ventilation assessment | | | | | | | |
| | NA | Conduct detailed Hazard Assessments (prioritized by highest risk); complete IH Hazard Assessment Forms SEE Attached checklist for common UTES work activities | | | | | | | |
| Ī | V | Conduct Closing Conference to summarize findings & Immediate Hazards | | | | | | | |
| L | B | old Font = Form is available in H:\Army National Guard\IHSAV Documents\Forms | | | | | | | |

Wenatchee Converted IFR

03.141716.38

BACK GROUND

- Wenatched theility has an indoor Firing range that has been converted into a Storage area. - 3 March 2010 peport by core & associates stated the IFR was converted in 2004/5, - IFR is accessed infrequently including removal of backstop

CUPPENT CONDITIONS - IFR (c) is located on the N Wall of the Annony -IFR is used for storage, and occasional weapon cleaning and is equipted with exercise equipment. - sound dampening panels from original IFR are Still intact precedere on the east side of IFR. - Original IFF concrete floors and concrete walls - original HVAC system, newly painted ducts - and some minor peeling paint on walls (BL - some discolored walls - new flourescent lighting - veturn vent at west end of GIFR Boiler pr at east end -2 door to Armony on Southwest was end.

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FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 952 of 980

Commendables:

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Posted to NGB FOIA Reading Room May, 2018

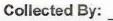
FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 953 of 980



Wipe Sampling Summary Form

Facility: Wenatchee IFR (Converted)

Date & Time: 10/8014 @ 3pm



Revised: September 18, 2013

| | Sample Informatio | n | Sample Area | Area Units | Analyses Requested | |
|----|-------------------|---|--------------------|------------------|-----------------------|--|
| 1 | Sample Number: | 100814-WIFR-B-01 | | Bulk | NIOSH 7300 - | |
| 1 | Sample Location: | Concrete, south wall of CIFR | | Bulk | Lead | |
| ~ | Sample Number: | 100814-WIFR-01 | 1 | 1ft ² | NIOSH 7300 - | |
| 2 | Sample Location: | Painted concrete floor, east end of CIFR | | m | Lead | |
| | Sample Number: | 100814-WIFR-02 | | | NIOSH 7300 - | |
| 3 | Sample Location: | Sound dampening panel, south wall on east end of CIFR | 1 1ft ² | | Lead | |
| 4 | Sample Number: | 100814-WIFR-03 | 1 | 1ft ² | NIOSH 7300 - | |
| 4 | Sample Location: | Desktop, east end of CIFR | | 111 | Lead | |
| 5 | Sample Number: | 100814-WIFR-04 | - 1 | 1ft ² | NIOSH 7300 - | |
| 9 | Sample Location: | Top of HVAC supply diffuser in CIFR | F | m | Lead | |
| 6 | Sample Number: | 100814-WIFR-05 | 1 | 1ft ² | NIOSH 7300 - | |
| 0 | Sample Location: | Inside HVAC supply ducting in CIFR | I | III | Lead | |
| 7 | Sample Number: | 100814-WIFR-06 | 1 | 1ft ² | NIOSH 7300 - | |
| 1 | Sample Location: | Discolored north wall of CIFR | | III | Lead | |
| 8 | Sample Number: | 100814-WIFR-07 | - 1 | 1ft ² | NIOSH 7300 - | |
| 0 | Sample Location: | Exercise area, floor of CIFR | | III | Lead | |
| 9 | Sample Number: | 100814-WIFR-08 | - 1 | 1ft ² | NIOSH 7300 - | |
| 3 | Sample Location: | HVAC return vent in CIFR | 1 | III | Lead | |
| 10 | Sample Number: | 100814-WIFR-BLNK | NA | NA | NIOSH 7300 - | |
| 10 | Sample Location: | Blank | INA | NA | Lead | |

Job Number: 013.IH1716.38

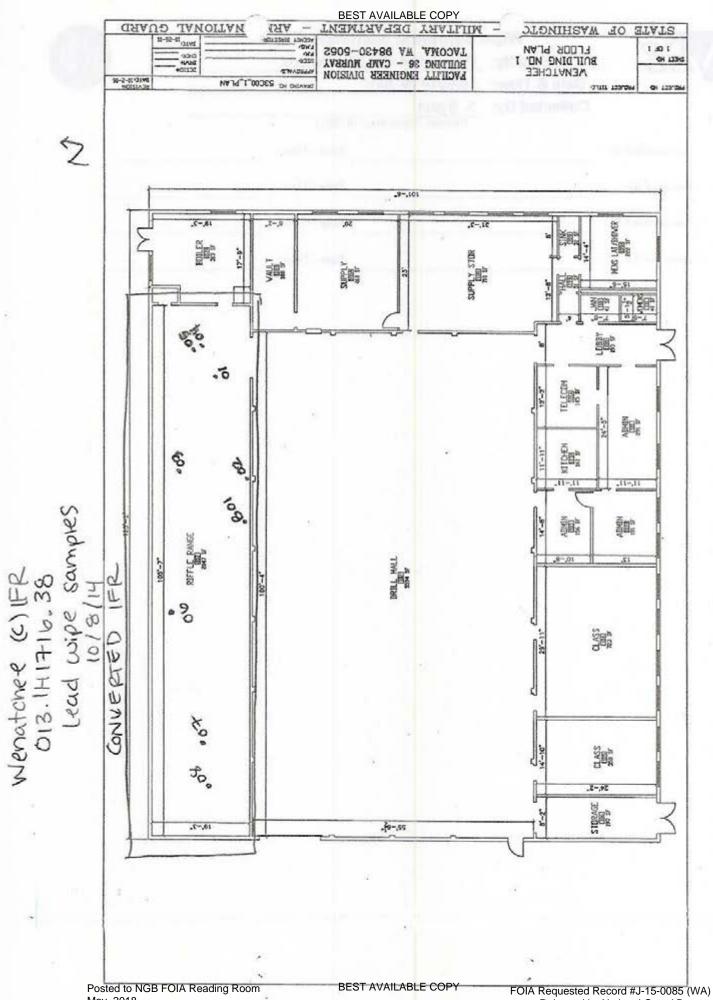
Status: Regular Rush-Results required by:

Company Name: Network Environmental Systems, Inc. Address: 1141 Sibley Street, Folsom, CA 95630 Contact: Telephone. (710) 555-2500 E-mail Address:

ALS Project Manager



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Released by National Guard Bureau Page 956 of 980

May, 2018



Equipment List Facility: Wenatchee Converted IFR, WA Date: October 8, 2014 Revised: September 18, 2013



Туре Model Number Serial Number **Calibration Date** Gray Wolf IAQ Meter IQ-410 01-936 22 January 2014 Konica Minolta Light Meter 2 June 2014 TL-1 90480719

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IAQ & Illumination Measurements

Facility: IFR (converted) - Wenatchee, WA



Date: October 8, 2014 Revised: September 18, 2013

| Location | CO ₂ Site Permissible Level ppm | Temperature Permissible Range 68 - 79°F | RH% Permissible Level <65% | CO Ceiling Limit 200 ppm | Illumination (FC) |
|---------------------------------|--|---|----------------------------------|--------------------------------|----------------------|
| W. End of IFR (weight room) | 580 | 74.3 | 41.0 | 0.1 | 76.2 |
| E. End of IFR (storage cage) | 568 | 73.2 | 41.0 | 0.1 | 7.5 |
| Outdoors (Control) | 525 | 82.2 | 37.2 | 0.5 | NA |
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CO₂ = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity CO = Carbon Monoxide

FC = Foot Candles



IAQ & Illumination Measurements Facility: IFR (converted) - Wenatchee, WA



Date: October 8, 2014

Revised: September 18, 2013

| Location | CO2 Site Permissible Levelppm | Temperature Permissible Range 68 - 79°F | RH% Permissible Level <65% | CO Ceiling Limit 200 ppm | Illumination (FC) |
|-------------|-------------------------------------|---|----------------------------------|--------------------------------|----------------------|
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CO₂ = Carbon Dioxide

°F = Fahrenheit

RH = Relative Humidity

CO = Carbon Monoxide

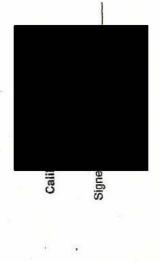
FC = Foot Candles

Photo Log - Wenatchee IFR (Converted)

- 1. Fire and evacuation plan posted in the converted IFR.
- 2. Fire extinguisher missing tags.
- 3. View of the converted IFR to the southwest.
- Original concrete floor and sound dampening panels on the northeast walls and ceiling of the converted IFR.
- 5. Original HVAC system and supply diffuser with newly painted ducting.
- 6. View to the west of storage lockers, exercise area and newly installed fluorescent lighting.
- 7. Exercise equipment area on the west end of the converted IFR.
- 8. Storage building to the north of the armory facility; newly built.
- 9. Storage buildings to the north of the armory facility.
- 10. View to the southeast of the converted IFR and armory facility.
- 11. Lead wipe sample 100814-WIFR-01 collected from east end painted concrete floor.
- 12. Lead wipe sample 100814-WIFR-02 collected from the south wall sound dampening panels; east end.
- 13. Lead wipe sample 100814-WIFR-03 collected from desktop near the east end.
- 14. Storage areas and door to the boiler room; view to the northeast.
- 15. Lead wipe sample 100814-WIFR-B-01 collected from the south concrete wall.
- 16. Lead wipe sample 100814-WIFR-04 collected from the top of the HVAC supply diffuser.
- 17. Lead wipe sample 100814-WIFR-05 collected from the inside of the HVAC supply duct.
- 18. Lead wipe sample 100814-WIFR-06 collected from a discolored wall on the north side.
- 19. Lead wipe sample 100814-WIFR-07 collected from the exercise area floor.
- 20. Lead wipe sample 100814-WIFR-08 collected from the original HVAC return vent.
- 21. Second door to the armory on the west end of the converted IFR; view to the southwest.

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 960 of 980 GrayWolf Sensing Solutions Calibration Certificate

| Model Number of UUT: IQ-410 Display Model Number: Socket SoMo | IQ-410 Socket SoM | <u>0</u> | Prob | Probe Software Version: v1.3,1,1 | Displa | Serial Number: 01-936 Display Software Version: ws2013.13 | : 01-936 : ws2013.13 |
|--|---|---------------------------|------------------|---|----------------------------|--|--|
| Company Name: Industrial Hygiene SW Calibration Date: 1/22/2014 Calibration Due Date: 1/22/2015 RA #: 140109MSIHS | lame: Industrial Hygie Date: 1/22/2014 Date: 1/22/2015 RA #: 140109MSIHS | vgiene SW 4 5 HS | | | ⊲ ni | Ambient Conditions: Temperature: 20.9°C Relative Humidity: 32.0%RH Barometric Pressure: 994.7mbar | <u>с</u> с 20.9°С : 32.0%RH : 994.7mbar |
| <u>Temperature:</u> Actual: Measured: | 16.5°C 16.5°C | 20.5°C 20.5°C | 38.1°C 38.1°C | <u>Relative Humidity:</u> Actual: Measured: | 1.2%RH 1.2%RH | 31.9%RH 31.9%RH | 75.0%RH 75.0%RH |
| Carbon Dioxide: s/n JX 002577 Actual: Measured: | 375ppm 375ppm | 1250ppm 1250ppm | | Carbon Monoxide: s/n 10466773-439 Actual: 0.5ppm Measured: 0.5ppm | 166773-439 5ppm 5ppm | 100.0ppm 100.0ppm | |



GrayWolf Calibration Information: calibration. GrayWolfSensing.com **GrayWolf Sensing Solutions** www.GrayWolfSensing.com Phone: (203) 402-0477



Certificate of Calibration

8710348 Certificate Page 1 of 2

Instrument Identification

PO Number: CC

Company ID: 607229 NETWORK ENVIRONMENTAL SYSTEMS

1141 SIBLEY STREET FOLSOM, CA 95630

Instrument ID: 90480719 Manufacturer: KONICA MINOLTA Description: ILLUMINANCE METER Model Number: TL-1 Serial Number: 90480719

Certificate Information

Reason For Service: CALIBRATION Type of Cal: NORMAL As Found Condition: OUT OF TOLERANCE As Left Condition: IN TOLERANCE, ADJUSTED Procedure: 33K4-4-475-1 30-JAN-13

Remarks:

 Technician: Cal Date 02Jun2014
 Cal Due Date: 02Jun2015 Interval: 12 MONTHS
 Temperature: 24.0 C Humidity: 43.0 %

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 Representative

issue Date: 6/2/2014

Calibration Standards

| NIST Traceable# | Inst. ID# | Description | Manufacturer | Model | Cal Date | Date Due |
|-----------------|------------|----------------|---------------|----------|-----------|-----------|
| 7302067 | 000800 | STANDARD SHUNT | RUBICON | ABS 1 | 26Apr2013 | 26Apr2015 |
| 1700294966 | 17-1001076 | 6 STEEL RULE | STARETT | C416R-72 | 22Mar2013 | 22Mar2015 |
| 8095776 | 17-1001081 | LUMINANCE STD | OPTRONIC LABS | OL 455-4 | 16Dec2013 | 16Dec2014 |
| | | | | | | |

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TABLE 1 LEAD WIPE SAMPLE RESULTS WENATCHEE CONVERTED IFR WENATCHEE, WA **OCTOBER 8, 2014**

| Sample Number | Sample Surface | Sample Location | Results (µg/ft ²) | ARNG Standard (µg/ft ²) |
|------------------|--------------------------------|--|----------------------------------|---|
| 100814-WIFR-01 | Painted concrete floor | Converted IFR, east end | 31 | 200 |
| 100814-WIFR-02 | Acoustic tile | Converted IFR, south wall on east end | 6.6 | 200 |
| 100814-WIFR-03 | Desktop | Converted IFR, east end | 9.8 | 200 |
| 100814-WIFR-04 | Top of HVAC supply diffuser | Converted IFR, east end | 950 | 200 |
| 100814-WIFR-05 | Inside HVAC supply ducting | Converted IFR, east end | 8400 | 200 |
| 100814-WIFR-06 | Discolored wall | Converted IFR, north wall | 1.6 | 200 |
| 100814-WIFR-07 | Exercise area | Converted IFR, west end floor | 20 | 200 |
| 100814-WIFR-08 | HVAC return vent | Converted IFR, west end | 1300 | 200 |
| 100814-WIFR-BLNK | Field Blank | N/A | < 1.3 | N/A |

µg/ft² = micrograms per square foot ARNG = Army National Guard

HUD = US Department of Housing and Urban Development

Bold = Above ARNG Standard limit

TABLE 2 PAINT CHIP SAMPLING FOR LEAD WENATCHEE CONVERTED IFR WENATCHEE, WA **OCTOBER 8, 2014**

| Sample Number | Sample Location/Description | Results (%) of Lead | ARNG/HUD Standard |
|------------------|---|------------------------|----------------------|
| 100814-WIFR-B-01 | South Wall of Converted IFR, Concrete Wall (white) | 0.095 | ≤ 0.5% |

ARNG = Army National Guard

HUD = US Department of Housing and Urban Development

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 963 of 980



ANALYTICAL REPORT

Report Date: October 22, 2014

Phone: (916) 353-2360 Fax: (916) 353-2375 E-mail:

Workorder: 34-1428806 Client Project ID: 013.IH1716.38/Wenatchee IFR Purchase Order: 013.IH1716.38 Project Manager:

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

| Sample ID: 100814-WIFR-B-01 | | | Received: 10/15/2014 |
|-----------------------------|---------|--|--|
| Lab ID: 1428806001 | Sampl | ing Location: Wenatchee IFR | |
| Method: NIOSH 7300 Mod. | Samplir | Media: Paint Chip ng Parameter: Weight 0.0681 grams | Prepared: 10/16/2014 Analyzed: 10/17/2014 |
| Analyte | % | RL (%) | |
| Lead | 0.095 | 0.0018 | |

| Sample ID: 100814-WIFR-01 | | | | Received: 10/15/2014 |
|---------------------------|---|--------------------|----------------|--|
| Lab ID: 1428806002 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 31 | 31 | 1.3 | |

| Sample ID: 100814-WIFR-02 | | | | Received: 10/15/2014 |
|---------------------------|---|--------------------|----------------|--|
| Lab ID: 1428806003 | Sampling Location: Wenatchee IFR | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 6.6 | 6.6 | 1.3 | |

| Sample ID: 100814-WIFR-03 | | | | Received: 10/15/2014 |
|---------------------------|---|--------|----------------|--|
| Lab ID: 1428806004 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 9.8 | 9.8 | 1.3 | |

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

TABLE

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Environmental 🕽

Wed, 10/22/14 5:55 PM

FOIA Requested Record #J-15-0085 (WA) Released by National Guard Bureau Page 964 of 980

IHREP-V11.3



ANALYTICAL REPORT

Workorder: 34-1428806 Client Project ID: 013.IH1716.38/Wenatchee IFR Purchase Order: 013.IH1716.38 Project Manager:

| Anal | vtical | Resul | ts |
|------|----------|-------|----|
| | A summer | | |

| Sample ID: 100814-WIFR-04 | | | | Received: 10/15/2014 |
|---------------------------|---|--------------------|----------------|--|
| Lab ID: 1428806005 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 950 | 950 | 1.3 | |

| Sample ID: 100814-WIFR-05 | | | | Received: 10/15/2014 |
|---------------------------|---|-----------------------|-------------|--|
| Lab ID: 1428806006 | Sampling Location: Wenatchee IFR | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² RL | (ug/sample) | |
| Lead | 8400 | 8400 | 6.3 | |

| Sample ID: 100814-WIFR-06 | | | | Received: 10/15/2014 |
|---------------------------|---|--------|----------------|--|
| Lab ID: 1428806007 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft² | RL (ug/sample) | |
| Lead | 1.6 | 1.6 | 1.3 | |

| Sample ID: 100814-WIFR-07 | | | | Received: 10/15/2014 |
|---------------------------|---|--------------------|----------------|----------------------|
| Lab ID: 1428806008 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 |
| | Samplin | g Parameter: Ar | ea 1 π* | Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 20 | 20 | 1.3 | |

| Sample ID: 100814-WIFR-08 | | - | | Received: 10/15/2014 |
|---------------------------|---|--------------------|----------------|--|
| Lab ID: 1428806009 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area 1 ft ² | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | 1300 | 1300 | 1.3 | |

| Sample ID: 100814-WIFR-BLN | IK | | | Received: 10/15/2014 |
|----------------------------|--|--------------------|----------------|--|
| Lab ID: 1428806010 | Sampli | | | |
| Method: NIOSH 7300 Mod. | Media: Ghost Wipe Sampling Parameter: Area Not Applicable | | | Prepared: 10/20/2014 Analyzed: 10/21/2014 |
| Analyte | ug/sample | ug/ft ² | RL (ug/sample) | |
| Lead | <1.3 | NA | 1.3 | and the second sec |



ANALYTICAL REPORT

Workorder: 34-1428806 Client Project ID: 013.IH1716.38/Wenatchee IFR Purchase Order: 013.IH1716.38 Project Manager:

Comments

Sample: 1428806006

The lead result for this sample was 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 reported dilution level.

Quality Control: NIOSH 7300 Mod. - (HBN: 137331)

The lead recoveries for lead dust wipe LCS 417562 (137%) and LCSD 417563 (135%) were high outside limits for unknown reasons. The lead dust wipe field samples and QC samples were prepared along with ghost wipe field samples and ghost wipe QC samples. The lead recoveries for ghost wipe LCS 417517 (101%) and LCSD 417518 (111%) are within limits so the data is reported as is without further comment.

Report Authorization (/S/ is an electronic signature that complies with 21 CFR Part 11)

| Method | Analy | st | Peer Review | |
|--|-----------------------------|---|-------------|-----------|
| NIOSH 7300 Mod. | distr. | | sheet. | Tracker (|
| aboratory Contact Informat ALS Environmental 960 W Levoy Drive Salt Lake City, Utah 84123 | Phone: (801 Email: alslt | I) 266-7700 lab@ALSGloba v.alssic.com | l.com | |
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Workorder: 34-1428806 Client Project ID: 013.IH1716.38/Wenatchee IFR Purchase Order: 013.IH1716.38 Project Manager:

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) | 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/qa/ |
| | 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: | | | |
| 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 |

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.



Wipe Sampling Summary Form

Facility: Wenatchee IFR (Converted)

Date & Time: 10/8014 @ 3pm Collected By:

Revised. September 18, 2013

| | Sample Informatio | n | Sample Area | Area Units | Analyses Requested |
|----|-------------------|---|----------------|------------------|-----------------------|
| 1 | Sample Number: | 100814-WIFR-B-01 | 1 | D.11. | NIOSH 7300 - |
| 8 | Sample Location: | Concrete, south wall of CIFR | 1 | Bulk | Lead |
| 2 | Sample Number: | 100814-WIFR-01 | | 1ft ² | NIOSH 7300 - |
| 4 | Sample Location: | Painted concrete floor, east end of CIFR | - 1 | In | Lead |
| | Sample Number: | 100814-WIFR-02 | , | | NIOSH 7300 - |
| 3 | Sample Location: | Sound dampening panel, south wall on east end of CIFR | 1 | 1ft ² | Lead |
| 4 | Sample Number: | 100814-WIFR-03 | | 1ft ² | NIOSH 7300 - |
| * | Sample Location: | Desktop, east end of CIFR | | III | Lead |
| 5 | Sample Number: | 100814-WIFR-04 | 1 | 1ft ² | NIOSH 7300 - |
| 0 | Sample Location: | Top of HVAC supply diffuser in CIFR | | 111 | Lead |
| 6 | Sample Number: | 100814-WIFR-05 | 1 | 1ft ² | NIOSH 7300 - |
| U | Sample Location: | Inside HVAC supply ducting in CIFR | | In | Lead |
| 7 | Sample Number: | 100814-WIFR-06 | 1 | 1ft ² | NIOSH 7300 - |
| 1 | Sample Location: | Discolored north wall of CIFR | | III | Lead |
| 8 | Sample Number: | 100814-WIFR-07 | - 1 | 1ft ² | NIOSH 7300 - |
| 0 | Sample Location: | Exercise area, floor of CIFR | | . 110 | Lead |
| 9 | Sample Number: | 100814-WIFR-08 | 1 | 1ft ² | NIOSH 7300 - |
| ฮ | Sample Location: | HVAC return vent in CIFR | | 111 | Lead |
| 10 | Sample Number: | 100814-WIFR-BLNK | NT A | NA | NIOSH 7300 - |
| 10 | Sample Location: | Blank | NA | INA | Lead |

Job Number: 013.IH1716.38

Status: X Regular Rush-Results required by:

Company Name: Network Environmental Systems, Inc. Address: 1141 Sibley Street, Folsom, CA 95630 Contact: Telephone: (916) 353-2360 E-mail Address

ALS Project Manager

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| $\boldsymbol{\wedge}$ | IES | | Sampling Su Wenatchee IFR | | n | |
|-----------------------|------------------|---------------|------------------------------|----------------|----------|---------|
| h In | material and the | Date & Time: | 10/8014 @ 3pm | 1 | | |
| | <u> </u> | Collected By: | Revised: Septemb | er 18, 2013 | | |
| | Relinquished B | | | Date / Time: | 10/10/14 | @ 3pm |
| | Received By: | | | _ Date / Time: | 10-14-1 | 4 13:59 |
| | Relinquished By. | | | Date / Time: | | |
| | Received By: | | | Date / Time: | | |

EMPLOYEE LIST

WENATCHEE CONVERTED IFR WENATCHEE, WA OCTOBER 8, 2014

| Last Name, First Name | Last 4 of SSN |
|-----------------------|---------------|
| | Not provided |

Posted to May, 2018

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Industrial Hygiene Southwest Violation Inventory Log

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

Wenatchee Readiness Center (RC), Wenatchee, Washington

| CONTROL B EOIA | HAZARD DESCRIPTION | SITE | RAC | HAZARD COUNTERMEASURE | SUSPENSE DATE | ACTION | Estimated Cost(s) | DATE | REFERENCES |
|--|--|-----------------------|-----|---|------------------|--------|----------------------|------|-------------------------------------|
| PCLOSED | | | | | | | _ | | |
| a 100 4.4-1 | Asbestos Survey not located | USARC RC Wenatchee | n | Locate the asbestos survey or contract with licensed firm to provide an asbestos survey. | | | | | 29 CFR . 1910.1001(j)(7) (iv) |
| 3WAWRC-070715- 4.4-1-4.4-2 | Asbestos awareness training not performed | USARC RC Wenatchee | n | If asbestos-containing materials are identified and assessed, provide awareness training to maintenance personnel for the specific material types and locations of asbestos in this facility. | | | | | 29 CFR 1910.1001(j)(7) (iv) |
| PEST AVAILABLE | The monthly and annual fire extinguisher inspections were not current. | USARC RC Wenatchee | n | Conduct the fire extinguisher monthly and annual inspections. | | | | ŧ | 29 CFR 1 910.157 |
| Advawrc-070715- | GFCI receptacles were not installed in the kitchen; nor were GFCI circuit breakers noted. | USARC RC Wenatchee | ę | Install GFCI protection in kitchen. | | | | | NFPA 70 Art. 210.8 |
| WAWRC-070715- 4.113 | Exit signs are 15 year sealed units manufactured in 1993 and are overdue replacement. | USARC RC Wenatchee | 4 | Replace illuminated exit signs. | | | | | 29 CFR 1910.37(b)(6) |
| 4114 | There was no emergency lighting maintenance plan. | USARC RC Wenatchee | 4 | Institute weekly emergency lighting inspections and ensure documentation is posted or kept with maintenance plan in the Safety Binder. | 45 | | | | 29 CFR 1 910.37 |

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Page 1 of 1

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 Wenatchee converted IFR. The paragraphs are numbered to correspond to the sections where first noted. (i.e., N.5.3 describes the following: the N is Conclusions & Recommendations and the 5.3 corresponds back to Section 5 – Facility Systems & Hazards; Item 3 – Asbestos Evaluation).

N.4.3 Metal Wipe Sampling - Recommendations to address the identified lead contamination include:

- A) Conduct a "Wall-to-Wall" lead assessment of the Converted IFR space to assess the extent of lead contamination present;
- B) Prohibit public access into the space that make up the Converted IFR space; Public meaning any non-National Guard personnel;
- C) Avoid any maintenance, repair, remodel, cleaning, and any other activities that may disturb existing lead contamination on the historical surfaces; and
- D) Clean/remediate contaminated surfaces in a manner that prevents spreading of lead dust/contamination.
- E) Conduct post remediation wipe sample to confirm the area is sufficiently clean.

N.4.5 Illumination Level Monitoring - The lighting on the east end of the converted IFR was insufficient for the tasks performed. Increase the lighting to provide the required 10 FC of illumination.

N.5.3 Asbestos Management - Conduct a facility survey to identify and assess extent of asbestos hazards. Implement an Asbestos Hazard Management Plan if asbestos is found to be present within the facility.

N.6.3 Safety Walk-Through

 Ensure annual inspection is conducted and tag is obtained for documentation. Perform monthly inspections for the fire extinguisher and record the date and initials on the inspection tag.

| FY 14 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 | | 1 | |
| 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 | 1 | , | 4 |
| Number of Personal Noise Dosimetry samples collected >= 85 dBA | 953-01-05 | 0 | ÷ | T. | |
| Number of Noise Sound Level samples collected >= 140 dBP with no controls | 953-01-06 | 0 | | × | ĸ |
| Number of Noise Sound Level samples collected >= 140 dBP | 953-01-06 | 0 | | i | x |
| Number of Noise Sound Level samples collected >= 140 dBP not controlled, that are precommended for control | 953-01-07 | 0 | 4 | ä | 3 |
| Number of Noise Sound Level samples collected >= 140 dBP not controlled | 953-01-07 | 0 | 4 | 1 | 8 |
| Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled. that are recommended for control | 953-01-08 | 0 | | i. | 15 |
| Number of Breathing Zone samples collected above Occupational Exposure Limit (OEL) not controlled | 953-01-08 | 0 | - | 1 | a |
| Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled, that are recommended for control | 953-01-09 | 0 | •2 | ſ | 1 |
| Number of Personal Noise Dosimetry samples collected >= 85 dBA not controlled | 953-01-09 | 0 | 100 | ï | * |
| 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 | IHT | IHT | IHT |
| | 953-02-10 | THI | IHT | IHT | THI |
| | 953-02-11 | -IHT | IHT | HT | IHT |
| | 953-02-11 | IHT | IHT | IHT | IHT |
| | 953-02-12 | IHT | IHT | IHT | IHT |
| | 953-02-12 | IHT | IHT | IHT | IHT |
| | 953-02-13 | IHT | IHT | IHT | THI |
| Characteristic Number of processes that require an assessment for potential inhalation exposure to employees during this IH Visit | 953-02-13 | IHT | IHT | IHT | IHT |
| _ | 953-02-14 | IHT | Ħ | THI | НТ |

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Wenatchee Converted IFR Wenatchee, WA

| FY 14 Installation Status Report (ISR) Services Documentation | Intellicode | Q1 | Q2 | Q3 | Q4 Annual |
|--|-------------|-----|-----|-----|-----------|
| Number of processes that require an assessment for potential inhalation exposure to employees within the last 12 months. | 953-02-14 | THI | IHT | IHI | IHT |
| 52 | 953-02-15 | IHT | IHT | IHT | IHT |
| 100-1 | 953-02-15 | IHT | IHT | IHT | IHT |
| 2223 | 953-02-16 | IHT | IHT | IHT | THI |
| 1000 | 953-02-16 | IHT | IHT | IHT | THI |
| stry was collected during their complete work shift the last 12 months. | 953-02-17 | IHT | IHT | IHT | IHT |
| 1997 | 953-02-17 | IHT | IHT | 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 | 0 | i | 1 | 1 |
| | 953-02-18 | 0 | i | - 1 | |
| 1.00 | 953-02-19 | 0 | | | r. |
| | 953-02-19 | 0 | , | | |
| by an IH with recommendations | 953-02-20 | THI | IHT | IHT | IHT |
| equired IH evaluation and recommendations | 953-02-20 | IHT | IHT | IHT | IHT |

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Wenatchee Converted IFR Wenatchee, WA

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rev. 8/2012

May, 2018



Facility Information Form Revised: December 4, 2013



| General Facility | y Informa | ation | | | Da | ate(s) of | Previous I | HSAVs: | 3 Mai | rch 2010 | | |
|---|-----------|------------------|-------------|-----------|----------|---------------|-------------|------------|-------|-------------------|-----------|-----|
| IH(s): | | | | | | | Date(s) of | HSAV: | 8 Oct | ober 2014 | | |
| Facility Name: | Wenat | tchee Convert | ed IFR | | | | | | | | | |
| Address: | 1230 5 | 5th Street, We | natchee, V | NA 988 | 01 | | | | | | | |
| Facility Commander: 0, 0 mender Dation / 509.76 | | | 6.255 | 1 / | | | | | | | | |
| Safety Officer: | | NA - Just 1 | full time e | mployee | e assig | 7480730873543 | ne facility | indel / el | nsn | | | |
| | | | | | | Name | /Phone Nu | mber / er | mail | | | |
| No Person(s): | 2 | Admin: | 2 | Maint: | 0 | Work | Sched: M | -F 0800- | -1700 | Size of Facility: | Unknown | ft² |
| (Include status - | -AGR, Fe | ed, Tech., IDR | , State or | Contrac | t Empl | oyee) | | | | | | |
| Unit(s): | B1-16 | 1 81st ABCT | | | Co-Te | nant(s): | State Ma | int. & M- | -Day | Build Date | 1950's | |
| | | Include UIC if | available | 112 | | | | List All | | Renovation | NA | |
| Brimon work | Admin | istrative duties | 5 | | | | | | | | 3 | |
| Primary work activities at Facility: | 1 of th | e full time em | ployees is | a Civilia | an - Fai | mily Prog | grams Coo | rdinator | | | | |
| | | | 9 | | | | | | | | | |

Written Health & Safety Programs / SOPs

| Program | Program Needed | Have Program | Date of Last Training | # Enrolled | Comments |
|------------------------|-------------------|-----------------|--------------------------|---------------|------------------------------|
| Confined Space | No | | | | 10 |
| Emergency Preparedness | Yes | Yes | NA | | In Building Manager Handbook |
| Hazard Communication | Yes | Yes | NA | | In Building Manager Handbook |
| Hearing Conservation | No | | | | |
| PPE | No | | | | |
| Respiratory Protection | No | | | | |

Y = Yes N = No NA = Not Applicable to this site

Documents / Records to Obtain

X Facility floor plan / evacuation map

NA List of equipment serviced / maintained

Previous IH reports

NA = Not Applicable to this site

- X Hazardous Materials inventory
- X Personnel list
- NA Others (List):

| Non – DoD Contractor | S |
|----------------------|---|
|----------------------|---|

х

| Service | Provider | * | Service | Provider | |
|-----------------------|----------|---|-------------------|----------|-------|
| Oil / Water Separator | | | _ Laundry | | |
| Tools | | | Pest Control | | |
| Rags | | | Hazardous Waste | | _ |
| Refuse | | | Crane Maintenance | | |
| Others: | NONE | | | | |

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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> <u>requirements may be reduced after it has been determined non-hazardous</u> <u>levels have been achieved</u>.
- 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:

 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.

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- 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.

| Kelly Tripp | BEST AVAILABLE COPY | |
|-----------------|---|--|
| From: | | |
| Sent: | Tuesday, October 28, 2014 8:37 AM | |
| To: | | |
| Cc: | | |
| Subject: | UPDATE: IHSAV Wenatchee (converted) - Elevated Lead Wipe Concentrations | |
| 5 * Q | | |
| Follow Up Flag: | Follow up | |
| Flag Status: | Flagged | |
| | | |

We recently completed an IHSAV at the above facility and wanted to inform you of elevated lead concentrations identified. Elevated lead concentrations were found on the following surfaces; the top of the HVAC supply diffuser (950ug/ft2), inside the HVAC supply ducting (8,400ug/ft2), and on the HVAC return vent (1,300ug/ft2). These samples were collected to asses historic surfaces of the converted IFR; it is likely that these components were part of the HVAC system that had operated in the IFR when it was active. It is believed, based on the visual appearance of these surfaces, they could have been present during operation of the IFR. Each of these surfaces were in low contact areas and are not expected to have a significant impact on potential lead exposure. However, if settled dust is contacted or disturbed it could become airborne & increases risk of exposure.

It is important to note that each of the surfaces sampled within the adjoining IFR were below the 40ug/ft2 criteria.

We have not informed personnel at the site of these identified conditions. Please let me know if you have any questions.

Regards, Brent

CIH, CSP, CAC, CDPH Lead I/A Senior Industrial Hygienist o: 916.542.7630 / f: 916.353.2375 / c: 510.316.9734 www.nesglobal.net

NES, Inc. 1141 Sibley St., Folsom, CA 95630



Please visit our website at <u>www.nesglobal.net</u> for more information about our Industrial Hygiene & Environmental Compliance Consulting Services, our Occupational Health & Safety Training and the complete list of products and training we offer.

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