



DEPARTMENT OF THE NAVY  
NAVY MEDICINE READINESS AND TRAINING COMMAND  
2080 CHILD STREET  
JACKSONVILLE FL 32214-5000

IN REPLY REFER TO:

6200

Ser 06IHZZ/0620

1 Sep 23

From: Commander, Navy Medicine Readiness and Training Command Jacksonville  
To: Commanding Officer, Marine Corps Logistics Base Albany, GA

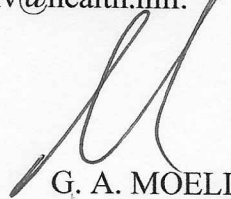
Subj: PERIODIC INDUSTRIAL HYGIENE SURVEY OF THE MARINE CORPS  
LOGISTICS BASE ALBANY, PUBLIC SAFETY DIVISION (PSD)

Ref: (a) OPNAVINST 5100.23H  
(b) OPNAV M-5100.23

Encl: (1) Executive Summary  
(2) Industrial Hygiene Survey Report (AL23010)

1. A Periodic Industrial Hygiene Survey of the Marine Corps Logistics Base (MCLB) Albany, Public Safety Division (PSD) was conducted on 27 Jul 23 as required by references (a) and (b).

2. My point of contact for this matter is William (Bill) Wolfe, who may be reached via COMM: (904) 546-7033 or email: [william.f.wolfe1.civ@health.mil](mailto:william.f.wolfe1.civ@health.mil).

  
G. A. MOELLER  
By direction

Copy to:  
MCLB Albany – Risk Management Office  
Navy Medicine Readiness and Training Unit (NMRTU) Albany – Occupational Health  
Department

## EXECUTIVE SUMMARY

A Periodic Industrial Hygiene Survey of Marine Corps Logistics Base (MCLB) Albany, Public Safety Division (PSD) was conducted on 27 July 2023 by William (Bill) Wolfe, Industrial Hygienist, Navy Medicine Readiness and Training Command Jacksonville (NMRTC JAX). The purpose of this survey was to identify health hazards present, assess actual health risk, and recommend controls where needed, as well as to assess your Occupational Health program status. No formal response to Industrial Hygiene is needed, although the MCLB Albany Risk Management Office may specify recommendations made in this report as items for mandatory corrective action. For hazard communication/education purposes, it is recommended that shop personnel be made aware of information provided in this report. Following is a summary of major findings and recommendations. Detailed findings, observations and recommendations are provided in enclosure (2) and its associated attachments.

**Item:** *Hazard Assessments.* Since the previous industrial hygiene (IH) surveys in March 2020 and July 2021, the only significant change was changing the Police Department, Military Working Dog (MWD) Section, and the Fire Department from Priority 1 shops to Priority 2 shops. This survey consisted of a walk-through evaluation of the work areas, sampling as required and employee interviews, as appropriate, to assist in the Industrial Hygiene assessment.

**Recommended Action:** Please review the individual work center hazard assessments in Attachment (1) for more details on all identified hazards. If there are any changes in work operation from what is described in this report, or if a focused health hazard evaluation of a specific work operation or new project is needed, please contact William (Bill) Wolfe, Industrial Hygienist, NMRTC JAX, 904-546-7033.

**Item:** *Personal Protective Equipment (PPE).* Personal Protective Equipment (PPE) listed in the Industrial Hygiene survey is specified for the control of identified occupational health stressors. Additional PPE not specified in the survey report (e.g., safety-toed shoes/boots, fall protection, safety vests, etc.) may be required for personnel.

**Recommended Action:** Consult with your cognizant safety representative, PPE hazard assessment or local instruction/Standard Operating Procedure (SOP) for any additional required PPE specific to your worksite.

**Item:** *Noise and Hearing Conservation.* Personnel in the command are exposed to noise levels in excess of the DoD Occupational Exposure Limit of 85 decibel-A weighted (dBA) as an 8-hour time weighted averaged (TWA) while conducting noise hazardous operations or working in noise hazardous environments. Personnel in the command are also exposed to noise levels in excess of the OSHA Occupational Exposure Limit of 140 decibel-Peak (dBP) during weapons qualification activities. Based on noise dosimetry conducted, the current hearing protection utilized by the command are capable of attenuating noise exposures below the OEL, except during weapons qualification activities.

**Recommended Action:** Command leadership should ensure that all personnel within the command identified in this survey as being overexposed to noise are enrolled into the Hearing Conservation Program (HCP) and receive annual audiograms, along with directing and

Enclosure (1)

emphasizing the need for wearing appropriate hearing protection when conducting noise hazardous processes (i.e., working with noise hazardous equipment, working around operating aircraft, etc.). Single hearing protection is required when noise levels exceed 85 dBA or 140 dBP as a peak exposure, and double hearing protection is required when noise levels exceed 104 dBA or 165 dBP as a peak exposure.

**Reference:** DoD Instruction 6055.12 of 14 August 2019

**Item:** *Ventilation.* The vehicle exhaust ventilation systems at the two (2) fire stations were not operational at the time of the survey. These systems are used to ventilate vehicle exhaust from the vehicle bays and were not able to be evaluated.

**Recommended Action:** The vehicle exhaust ventilation systems at the two (2) fire stations should be repaired so that they are functioning properly and also placed on a preventive maintenance (PM) schedule and receive regular maintenance to ensure that they continue to function properly to ensure that adequate ventilation is being provided to minimize potential airborne exposures to vehicle exhaust. Contact Industrial Hygiene once repairs have been made so that the system can be evaluated.

**Reference:** American Conference of Governmental Industrial Hygienists, Industrial Ventilation: A Manual of Recommended Practice for Design, 31<sup>st</sup> Edition, 2023

**PERIODIC INDUSTRIAL HYGIENE SURVEY  
MARINE CORPS LOGISTICS BASE (MCLB) ALBANY  
PUBLIC SAFETY DIVISION (PSD)  
ALBANY, GA  
REPORT NUMBER: AL23010**

Ref: (a) OPNAV M-5100.23 of 05 Jun 2020, *Navy Safety and Occupational Health Manual*  
(b) Navy and Marine Corps Public Health Center (NMCPHC) Industrial Hygiene Field Operations Manual (IHFOM)

Att: (1) Periodic Industrial Hygiene Survey: Shop Assessments, Medical Surveillance Recommendations and Workplace Monitoring Plan  
(2) Industrial Ventilation Systems Summary  
(3) Noise Survey and Hearing Protection Requirements and Personal Noise Sampling Results Summary  
(4) Neutral Posture for Computer Use/Computer Breaks  
(5) Customer Satisfaction Survey

1. **Introduction.** Per references (a) and (b), a Periodic Industrial Hygiene Survey of MCLB Albany, PSD was conducted on 27 July 2023 by William (Bill) Wolfe, Industrial Hygienist, Navy Medicine Readiness and Training Command Jacksonville (NMRTC JAX). This survey consisted of a walk-through evaluation of the work areas, a review of the operations and the hazards associated and employee interviews, as appropriate, to assist in the industrial hygiene assessment.

2. **Report Contents.** Reference (a) requires that each Navy workplace, or naval base supported DOD workplace, be thoroughly evaluated in order to accurately identify and quantify all potential health hazards. This report fulfills that requirement. The updated Periodic Industrial Hygiene Survey: Shop Assessments, medical surveillance recommendations and workplace monitoring plan for surveyed work centers are provided in attachment (1). A summary of ventilation measurements is provided in attachment (2). A list of the noise hazardous areas and operations and the required level of hearing protection is provided in attachment (3) along with a summary of personal noise sampling results. Attachment (4), the Neutral Posture for Computer Use/Computer Breaks, can be used for training personnel in utilizing their computer workstations ergonomically. Attachment (5) is a Customer Satisfaction Survey, so that you may critique the services provided.

3. **Design Reviews.** Per reference (a), industrial hygienists should participate in the review of plans and specifications for local projects, standard operating procedures, purchasing transactions, and contracts which involve, or could create, exposure to potential health hazards, such as toxic materials, radiation, noise, or other health hazards. Cognizant facilities management and/or occupational health and safety personnel should ensure that the supporting industrial hygienist is made aware of such plans and specifications and that they are made available for his/her review.

Enclosure (2)

**4. Re-evaluation Schedule and Changes in the Workplace.** Please retain this report on file and post a copy in a common work area for personnel to review. IH surveys had historically been accomplished with an established survey frequency based on the nature of operations at the Activity/Command in accordance with reference (a). Survey periodicity is scheduled at the command or shop level in accordance with reference (b). Ratings and associated survey frequency are now listed on individual workcenter assessment(s) within this report and reflect as High (annual), Moderate (biennial), or Low (quadrennial) hazard category. Shop periodicity will be continually re-assessed during future IH surveys.

The following table provides the shop hazard category and re-evaluation schedule for the work centers.

<b>Work Center</b>	<b>Hazard Category<sup>(1)</sup></b>	<b>Current Survey Date (Mon/Yr)</b>	<b>Next Survey Due (Mon/Yr)</b>
PSD, Office of the Director	3 (Low)	JUL 23	JUL 27
PSD, Risk Management Office	2 (Moderate)	JUL 23	JUL 25
PSD, Pass and ID Office	3 (Low)	JUL 23	JUL 27
PSD, Police Department	2 (Moderate)	JUL 23	JUL 25
PSD, Military Working Dog Section	2 (Moderate)	JUL 23	JUL 25
PSD, Fire Department	2 (Moderate)	JUL 23	JUL 25
(1) Hazard categories are based on a consideration of health risk of identified chemical stressors and potential of these stressors to exceed Navy occupational exposure limits, ACGIH Threshold Limit Values, or OSHA substance-specific standards. Hazard category determination protocol is spelled out in reference (b), Chapter 2. Industrial Hygiene has discretion to conduct surveys more often than the minimum frequencies listed above.			

Any significant changes in the type of operations currently performed, current workplace setting, new equipment acquired, or change in the kinds or amounts of chemical used, as identified in the survey, will result in a need for an immediate re-evaluation of the affected area. Industrial Hygiene (904-546-7033), NMRTC JAX should be notified in the event of any significant operational changes as described above so that a prompt re-evaluation can be completed.

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**INDUSTRIAL HYGIENE SURVEY**  
**WORKCENTER SPECIFIC EVALUATIONS FOR**  
**MARINE CORPS LOGISTICS BASE ALBANY**  
**PUBLIC SAFETY DIVISION (PSD)**  
**ALBANY, GA**  
**JULY 2023**

<b>DEPARTMENTS/WORKCENTERS</b>	<b>PAGE</b>
PSD, Office of the Director	2
PSD, Risk Management Office	6
PSD, Police Department	12
PSD, Pass and ID	25
PSD, Military Working Dog (MWD) Section	29
PSD, Fire Department	36

**Periodic Industrial Hygiene Survey: Shop Assessment**

v1.3

**Survey Date:** 27 JUL 23**Shop Priority:** 3 - Low**Command: N67008 /****Shop: PSD, Office of the Director**

Location: Building 3500

**Industrial Hygienist:** Wolfe, William  
william.f.wolfe1.civ@health.mil**Safety POC:** Peacock, Jon  
jon.peacock@usmc.mil**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

**1. Shop Description****# of Shop Personnel**

Personnel are responsible for the day-to-day operation of the Public Safety Division, to include providing policy, guidance, and financial support for the PSD organization. The office includes the PSD Director and Administrative support.

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**2. Observations and Notes**

07/27/2023

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation.

07/27/2023

Work-related musculoskeletal disorders (WMSD) risk factors which apply to all administration spaces: Personnel should ensure that all workstations are set up per attachment (4) of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.

**3. List of Processes**

Process Name	# of Process Personnel
General Housekeeping	2
Professional/Administrative Duties	2

**4. Process Information, Controls, and Exposure Assessments**

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based solely on the IH exposure assessment. Controls marked as Recommended are considered best practice by the IH to further reduce exposures based on alternate OELs or used based on an instruction/Standard Operating Procedure (SOP). Additional PPE (e.g. safety-toed shoes/boots, fall protection, safety vests, etc.) not identified in this section may be required for personnel. Consult with your cognizant Safety representative, PPE hazard assessment or local instruction/SOP/Maintenance Requirement Card (MRC) for any additional required PPE specific to your worksite.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

Process: General Housekeeping	
Frequency: Daily	Duration: 0-15 minutes
Description: Personnel use household type cleaning products (Lysol (isopropanol), bleach solutions (sodium hypochlorite), Pledge (petroleum distillates), etc.) that are sprayed and wiped with paper towels or cloth rag in personal spaces. All common areas are cleaned and maintained by various personnel within each section. PPE (suitable protective gloves) is available to be worn. Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.	

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in an office environment, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting general housekeeping to minimize dermal exposure from cleaning constituents.			

#### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
General Housekeeping	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Office of the Director Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					



General Housekeeping	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
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SEG: PSD, Office of the Director

Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).

## Process: Professional/Administrative Duties

Frequency: Daily      Duration: 6-8 hours

Description: Personnel work at desks where the keyboard and mouse are placed on top of the desks. Desks had hard edges and some keyboards were not equipped with a wrist rest or gel pads in front of them. Chairs observed being used were of good ergonomic design; having adjustable height and arm rests, and adequate lumbar support. Sit-Stand workstations can be obtained if requested.

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.

Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

## 5. Hazards that have Special Notations

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

None

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

None

Respiratory sensitizer: Hazard that can induce hypersensitivity of the airways following inhalation of the stressor. Work exposures to these stressors may be severe

None

Dermal sensitizer: Hazard that can induce an allergic response following skin contact with the stressor. Worker exposures to these stressors may be severe.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

None

Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

None

## 6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on potential or actual exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

No Medical Surveillance Recommended

## 7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

No Workplace Monitoring Requested at this time.

**Periodic Industrial Hygiene Survey: Shop Assessment**

v1.3

**Survey Date:** 27 JUL 23**Shop Priority:** 2 - Medium**Command: N67008 /****Shop: PSD, Risk Management Office**

Location: Building 3500

**Industrial Hygienist:** Wolfe, William  
william.f.wolfe1.civ@health.mil**Safety POC:** Peacock, Jon  
jon.peacock@usmc.mil**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

**1. Shop Description****# of Shop Personnel**

Personnel are responsible for the management of the various Occupational Health and Safety programs (i.e., Respiratory Protection, Lockout/Tagout, Confined Space Entry, Ergonomics, etc.) at MCLB Albany, to include site safety inspections of MCLB and Tenant organizations, providing various health and safety training courses, investigation of mishaps and near misses, the administration of off duty/recreational safety programs, and provide technical advice and consultation on OSHA's Voluntary Protection Program (VPP).

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**2. Observations and Notes**

07/27/2023

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation.

07/27/2023

Work-related musculoskeletal disorders (WMSD) risk factors which apply to all administration spaces: Personnel should ensure that all workstations are set up per attachment (4) of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.

**3. List of Processes**

Process Name	# of Process Personnel
General Housekeeping	7
Painting, Spray/Aerosol	6
Professional/Administrative Duties	7
Safety Training	7
Site Safety Inspections	6

#### 4. Process Information, Controls, and Exposure Assessments

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based solely on the IH exposure assessment. Controls marked as Recommended are considered best practice by the IH to further reduce exposures based on alternate OELs or used based on an instruction/Standard Operating Procedure (SOP). Additional PPE (e.g. safety-toed shoes/boots, fall protection, safety vests, etc.) not identified in this section may be required for personnel. Consult with your cognizant Safety representative, PPE hazard assessment or local instruction/SOP/Maintenance Requirement Card (MRC) for any additional required PPE specific to your worksite.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

##### Process: General Housekeeping

Frequency: Daily      Duration: 0-15 minutes

Description: Personnel use household type cleaning products (Lysol (isopropanol), bleach solutions (sodium hypochlorite), Pledge (petroleum distillates), etc.) that are sprayed and wiped with paper towels or cloth rag in personal spaces. All common areas are cleaned and maintained by various personnel within each section. PPE (suitable protective gloves) is available to be worn.  
Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

##### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in an office environment, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

##### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting general housekeeping to minimize dermal exposure from cleaning constituents.			

##### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
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General Housekeeping	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Risk Management Office Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					
General Housekeeping	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
SEG: PSD, Risk Management Office Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).					

### Process: Painting, Spray/Aerosol

Frequency: Special Occasions      Duration: 0-15 minutes

Description: Personnel may be required to spray paint lines on the motorcycle rider's road course. PPE (suitable protective gloves) is available to be worn.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ACETONE; CARBON BLACK	Recommended	Yes
Comments: Spray/aerosol painting is conducted outdoors, natural dilution is recommended to minimize the potential airborne exposures to the constituents of the spray paints.			

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	ACETONE; CARBON BLACK	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting spray/aerosol painting tasks to minimize dermal exposure to the constituents of the spray/aerosol paint.			

#### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Painting, Spray/Aerosol	ACETONE Inhalation	2400 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Risk Management Office Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based limited frequency and duration of use, and natural dilution. An alternate OEL exists for this stressor (ACGIH TLV 594.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to the constituents of the spray paint used.					

Painting, Spray/Aerosol	CARBON BLACK Inhalation (Carcinogen)	3.5 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Risk Management Office Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based limited frequency and duration of use, and natural dilution. An alternate OEL exists for this stressor (ACGIH TLV 3.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to the constituents of the spray paint used.					

### Process: Professional/Administrative Duties

Frequency: Daily      Duration: 6-8 hours

Description: Personnel work at desks where the keyboard and mouse are placed on top of the desks. Desks had hard edges and some keyboards were not equipped with a wrist rest or gel pads in front of them. Chairs observed being used were of good ergonomic design; having adjustable height and arm rests, and adequate lumbar support. Sit-Stand workstations can be obtained if requested.  
 WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.  
 Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

### Process: Safety Training

Frequency: 2-3 Times/Year      Duration: 2-4 hours

Description: Personnel are responsible for conducting various safety training classes to MCLB Albany and Tenant organizations. This requires personnel to spend prolonged periods of time standing (static posture) while instructing classes.  
 WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.  
 Prolonged standing (static posture) is a NMCPHC listed reproductive/developmental hazard.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

### Process: Site Safety Inspections

Frequency: Daily      Duration: 2-4 hours

Description: Personnel are responsible for the management of the various Occupational Health and Safety programs on MCLB Albany. This includes conducted site safety inspections of MCLB Albany organizations and tenants. This may require personnel to work outdoors for prolonged periods of time (ultraviolet radiation and heat stress) and potentially be exposed to various noise sources. Personnel may also be exposed to other physical and chemical hazards associated with inspecting various work environments. PPE is available to be worn and should be the same PPE used in the locations being inspected.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
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Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on WBGT Flag conditions and Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Earplugs and/or Ear Muffs	NOISE	Required	Yes
Comments: Single hearing protection is required for noise levels at or above 85 dBA or 140 dBP. Double hearing protection is required for noise levels at or above 104 dBA or 165 dBP.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Site Safety Inspections	NOISE (Reproductive)	85 dBA 8 hr TWA DoD		Yes	Yes
SEG: PSD, Risk Management Office Rationale: Exposure to noise levels in excess of the DoD OEL of 85 dBA is not anticipated based on the duration of actual exposure to noise throughout the day; however, exposure to noise hazardous equipment is possible for short periods of time.					
Site Safety Inspections	HEAT STRESS			Yes	No
SEG: PSD, Risk Management Office Rationale: The potential for heat stress occurring while weapons qualification is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Site Safety Inspections	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD, Risk Management Office Rationale: The potential for UV radiation issues occurring while weapons qualification is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

**5. Hazards that have Special Notations**

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

CARBON BLACK (OSHA/NIOSH (Ca)- Carcinogen)

ULTRAVIOLET RADIATION (IARC (1)- Human Carcinogen)

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

NOISE

Respiratory sensitizer: Hazard that can induce hypersensitivity of the airways following inhalation of the stressor. Work exposures to these stressors may be severe

None

Dermal sensitizer: Hazard that can induce an allergic response following skin contact with the stressor. Worker exposures to these stressors may be severe.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

None

Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

None

## 6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on potential or actual exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

No Medical Surveillance Recommended

## 7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

Entry ID	Process Name	Hazard Name	Sampling Task Type	Projected Due Date	Frequency
2187407	Site Safety Inspections	NOISE	Noise Dosimetry	07/31/2025	One Time



**Periodic Industrial Hygiene Survey: Shop Assessment**

v1.3

**Survey Date:** 27 JUL 23**Shop Priority:** 2 - Medium**Command: N67008 /****Shop: PSD, Police Department**

Location: Building 7520

**Industrial Hygienist:** Wolfe, William  
william.f.wolfe1.civ@health.mil**Safety POC:** Peacock, Jon  
jon.peacock@usmc.mil**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

**1. Shop Description****# of Shop Personnel**

Personnel are responsible for providing operational and physical security for MCLB Albany and all tenant organizations. Tasks include patrolling the base, providing security at all vehicle gates, managing of the armory for the department, and acting as first responders. The department consists of both Active Duty Marines and Government Civilian personnel.

**88****2. Observations and Notes**

07/27/2023

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation.

07/27/2023

Work-related musculoskeletal disorders (WMSD) risk factors which apply to all administration spaces: Personnel should ensure that all workstations are set up per attachment (4) of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.

**3. List of Processes**

Process Name	# of Process Personnel
Armory Operations	1
CBRN Response	71
Criminal Investigation Operations	3
Dispatch Operations	7
Gate Operation	53
General Housekeeping	88
Noise Hazardous Operations	77

Physical Security	2
Police Operations/Patrolling	71
Professional/Administrative Duties	88
Supply/Material Handling	1
Training Operations	1
Weapon Qualification	77

#### 4. Process Information, Controls, and Exposure Assessments

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based solely on the IH exposure assessment. Controls marked as Recommended are considered best practice by the IH to further reduce exposures based on alternate OELs or used based on an instruction/Standard Operating Procedure (SOP). Additional PPE (e.g. safety-toed shoes/boots, fall protection, safety vests, etc.) not identified in this section may be required for personnel. Consult with your cognizant Safety representative, PPE hazard assessment or local instruction/SOP/Maintenance Requirement Card (MRC) for any additional required PPE specific to your worksite.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

#### Process: Armory Operations

Frequency: Daily      Duration: 6-8 hours

Description: There is one person who works in the ready for issue room. This includes maintaining logs and performing 2nd echelon repairs (replacing small parts)cleaning components by CLP application using a cotton swab. When working with any weapon there is a possibility of residual exposure to lead dust left on the weapon and when handling ammunition.

#### Engineering

Control Description	Hazards Controlled	Control Use	Adequate
Adequate Task Lighting	Visual Demand	Recommended	Yes
Comments: Having adequate task lighting is recommended to minimize eye strain (visual demand) during the disassembly and assembly of the various weapon platforms maintained by the armory.			

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture; Visual Demand	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

Natural Dilution	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Weapons/Equipment inspection and maintenance is conducted indoors in the armory, natural dilution is recommended to minimize potential airborne exposures to the CLP (petroleum distillates) used.			
Proper Hand Washing	LEAD	Recommended	Yes
Comments: Proper hand washing is recommended after conducting weapons qualifications activities to minimize the potential of ingestion of lead.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting weapons cleaning tasks to minimize dermal exposure to lead and the constituents of the CLP (petroleum distillates) used.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Armory Operations	LEAD Inhalation (Carcinogen) (Reproductive) (Ototoxin)	0.05 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on nature of exposure and natural dilution. Workers potentially exposed to airborne lead at any level are required to be informed of the content of Appendices A and B of 29 CFR 1910.1025 (OSHA Lead standard). Hand washing is expected to provide adequate control against transfer and ingestion of the Lead.					
Armory Operations	PETROLEUM DISTILLATES Inhalation	2000 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use and natural dilution. The use of PPE provides adequate protection from skin contact.					

**Process: CBRN Response**

Frequency: Special Occasions	Duration: 6-8 hours
Description: Patrol Officers are trained and equipped to act as first responders to Chemical, Biological, and Radiological and Nuclear (CBRN) events. PPE (suitable protective gloves) is available to be worn. Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.	

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Full-Face CBRN Respirator (M40)	CBRN	Required	Yes
Comments: CBRN events are rare; however, personnel are issued a full-face CBRN respirator (M40) and are required to wear it in the event of a CBRN event. Note: Military personnel are considered medically certified to wear a respirator if they have a current PHA without limiting conditions.			
Suitable Protective Gloves	CBRN	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting police operations/patrolling tasks to minimize potential dermal exposure to CBRN products.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
CBRN Response	CBRN Inhalation			No	No

SEG: PSD, Police Department

Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) to CBRN elements is unknown or unpredictable. Security staff are not equipped to enter CBRN or IDLH designated areas without consultation with the Incident Commander due to limitations of Air Purifying Respirators (APR).

## Process: Criminal Investigation Operations

Frequency: Monthly      Duration: 2-4 hours

Description: Personnel are responsible for conducting various types of criminal investigations and evidence collection throughout the Base. This may include potential contact with illicit drugs and/or blood and body fluids. PPE (suitable protective gloves) is available to be worn.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Standard Operating Procedure (SOPs)	BLOODBORNE PATHOGENS; Illicit Drugs All Classes	Recommended	Yes
Comments: Adhering to established SOPs for the collection of evidence is recommended to minimize dermal exposure to illicit drugs and blood and/or body fluid contaminated evidence.			
Universal Precautions	BLOODBORNE PATHOGENS	Recommended	Yes
Comments: Following universal precaution protocols are recommended to minimize dermal exposure to bloodborne pathogens associated with blood and/or body fluid contaminated evidence.			

### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	BLOODBORNE PATHOGENS; Illicit Drugs All Classes	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever collecting evidence involving illicit drugs and blood and/ body fluid contaminated evidence to minimize dermal exposure to the contaminated evidence.			

### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Criminal Investigation Operations	BLOODBORNE PATHOGENS Skin and/or Eye Contact			Yes	No

SEG: PSD, Police Department

Rationale: No significant exposure is expected based on the frequency of the process and following universal precaution protocols. The use of PPE provides adequate protection from skin contact to bloodborne pathogens.

Criminal Investigation Operations	Illicit Drugs All Classes Inhalation			Yes	No
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SEG: PSD, Police Department

Rationale: An Occupational Exposure Limit (OEL) has not been established for this hazard by OSHA or Navy recognized authorities. As good practice, exposure should be minimized to the greatest degree feasible. Potential for exposure to levels of health significance is not expected based on the frequency of the task, the nature of the task, and the adherence to established SOPs.

**Process: Dispatch Operations**

Frequency: Daily      Duration: More than 10 hours

Description: Personnel are responsible for monitoring the Base's alarm systems, 911 services, and dispatching resources as necessary. This requires personnel to spend prolonged periods of time sitting (static postures).

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.

Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

**Process: Gate Operation**

Frequency: Daily      Duration: 4-6 hours

Description: Personnel are responsible for manning the security gates onto MCLB Albany. This includes conducting ID and vehicle checks on inbound cars and trucks. This requires personnel to be outdoors (heat stress and ultraviolet radiation) and to stand (static posture) for prolonged periods of time. Personnel are also exposed to vehicle exhaust (both gasoline and diesel) while manning the gates.

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.

Excessive standing (static posture) is a NMCPHC listed reproductive/developmental hazard.

Heat stress is a NMCPHC listed reproductive/developmental hazard.

**Engineering**

Control Description	Hazards Controlled	Control Use	Adequate
Anti-Fatigue Mat	Static Posture	Recommended	Yes
Comments: The use of anti-fatigue mats is recommended to minimize ergonomic hazard during while manning the gates. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			
Natural Dilution	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	Yes
Comments: Gate security duties are conducted outdoors, natural dilution is recommended to minimize potential airborne exposures to vehicle exhaust products.			
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on WBGT Flag conditions and Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
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Gate Operation	CARBON MONOXIDE Inhalation (Reproductive) (Ototoxin)	55 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not anticipated based on natural dilution. An alternate OEL exists for this stressor (ACGIH TLV 29.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed.					
Gate Operation	DIESEL EXHAUST Inhalation (Carcinogen)			Yes	No
SEG: PSD, Police Department Rationale: An Occupational Exposure Limit (OEL) has not been established for this hazard by OSHA or Navy recognized authorities. As good practice, exposure should be minimized to the greatest degree feasible. Potential for exposure to levels of health significance is not expected based on natural dilution.					
Gate Operation	HEAT STRESS			Yes	No
SEG: PSD, Police Department Rationale: The potential for heat stress occurring is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Gate Operation	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD, Police Department Rationale: The potential for UV radiation issues occurring is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

### Process: General Housekeeping

Frequency: Daily      Duration: 0-15 minutes

Description: Personnel use household type cleaning products (Lysol (isopropanol), bleach solutions (sodium hypochlorite), Pledge (petroleum distillates), etc.) that are sprayed and wiped with paper towels or cloth rag in personal spaces. All common areas are cleaned and maintained by various personnel within each section. Personnel also use household cleaners to clean patrol vehicles. PPE (suitable protective gloves) is available to be worn.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in an office environment or in patrol vehicles, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting general housekeeping to minimize dermal exposure from cleaning constituents.			

#### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
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General Housekeeping	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					
General Housekeeping	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).					

### Process: Noise Hazardous Operations

Frequency: Daily      Duration: 6-8 hours

Description: Personnel are responsible for various tasks that may require them to work around noise hazardous environments like conducting gate operations (vehicle noise) and operating police vehicles with lights and sirens during police responses.

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Earplugs and/or Ear Muffs	NOISE	Required	Yes
Comments: Single hearing protection is required for noise levels at or above 85 dBA or 140 dBP. Double hearing protection is required for noise levels at or above 104 dBA or 165 dBP.			

#### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Noise Hazardous Operations	NOISE (Reproductive)	85 dBA 8 hr TWA DoD	87 dBA	No	Yes
SEG: PSD, Police Department Rationale: Exposure to noise levels in excess of the DoD OEL of 85 dBA is anticipated based on working with or in close proximity to noise hazardous equipment and previous personal noise sampling. See Noise Sampling Attachment (Attachment 3).					

### Process: Physical Security

Frequency: Weekly      Duration: 1-2 hours

Description: Personnel are responsible for conducting assessments and inspections at the gates and various locations throughout the base and are responsible for implementing Antiterrorism and Force Protection (ATFP) security measures to protect personnel and property. Personnel are also responsible for identifying and locating barricades/barriers (physical stress - heavy lifting).  
 WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough.  
 Any ergonomic-related injury should be reported to the Command's Safety Office.  
 Heavy lifting is a NMCPHC listed reproductive/developmental hazard.

#### Engineering

Control Description	Hazards Controlled	Control Use	Adequate
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Carts and/or Dollies	PHYSICAL STRESS	Recommended	Yes
Comments: The use of material handling equipment (i.e., carts and/or dollies) is recommended to minimize identified ergonomic hazards associated with lifting and carrying of heavy items. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Proper Lifting Techniques (2-person lifts)	PHYSICAL STRESS	Recommended	Yes
Comments: A two-person lift is recommended for items weighing 35 pounds or more. This weight limit may be decreased based on required posture, height of lift, and other factors. The NIOSH Lifting Equation or ACGIH TLVs for Lifting Tasks should be consulted in those cases. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Physical Security	PHYSICAL STRESS			Yes	No
SEG: PSD, Police Department Rationale: The potential for physical stresses (heavy lifting) exposure occurring is minimized based on adhering to proper lifting techniques and the use of material handling equipment (carts/dollies). NIOSH's Lifting Equation or ACGIH's Lifting TLV table should be utilized for maximum weights to be lifted. Any ergonomic related injury should be reported to the unit safety representative.					

**Process: Police Operations/Patrolling**

Frequency: Daily      Duration: 4-6 hours

Description: Personnel are required to Patrol the inside of the base. Patrols provide mobile security presence, visible deterrent, and a show of force to both the base populous and to the general public. Shifts will rotate every 4-6 hours depending on manning. When responding on site to calls personnel may potentially come into contact with blood and/or bodily fluids. Personnel are also required to fuel (gasoline) the patrol vehicles whenever needed. Select personnel are also members of the Base's Special Response Team (SRT).

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.

Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			
Natural Dilution	GASOLINE	Recommended	Yes
Comments: Fueling of vehicles is conducted outdoors, natural dilution is recommended to minimize potential airborne exposures to gasoline.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	BLOODBORNE PATHOGENS; GASOLINE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting police operations/patrolling tasks to minimize potential dermal exposure to gasoline, and blood and/or body fluids.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
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Police Operations/Patrolling	BLOODBORNE PATHOGENS Skin and/or Eye Contact			Yes	No
SEG: PSD, Police Department Rationale: No significant exposure is expected based on the frequency of the process and following universal precaution protocols. The use of PPE provides adequate protection from skin contact to bloodborne pathogens.					
Police Operations/Patrolling	GASOLINE Inhalation (Carcinogen) (Reproductive)	890 mg/m3 8 hr TWA ACGIH		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not anticipated based on natural dilution (fueling occurs outdoors). The use of PPE provides adequate protection from skin and eye contact.					

### Process: Professional/Administrative Duties

Frequency: Daily      Duration: 4-6 hours

Description: The administrative personnel and dispatchers work in an office setting for the majority of their time at work, with Patrol Officers spend less time working at administrative tasks.  
 Personnel work at desks where the keyboard and mouse are placed on top of the desks. Desks had hard edges and some keyboards were not equipped with a wrist rest or gel pads in front of them. Chairs observed being used were of good ergonomic design; having adjustable height and arm rests, and adequate lumbar support. Sit-Stand workstations can be obtained if requested. WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.  
 Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

### Process: Supply/Material Handling

Frequency: Daily      Duration: 4-6 hours

Description: Personnel are responsible the receiving, storage, and distribution of the Police Department's supplies. This may require personnel to lift and carry items that may be in excess of 35 pounds (physical stress - heavy lifting).  
 WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough.  
 Any ergonomic-related injury should be reported to the Command's Safety Office.  
 Heavy lifting is a NMCPHC listed reproductive/developmental hazard.

#### Engineering

Control Description	Hazards Controlled	Control Use	Adequate
Carts and/or Dollies	PHYSICAL STRESS	Recommended	Yes
Comments: The use of material handling equipment (i.e., carts and/or dollies) is recommended to minimize ergonomic hazard during supply/material handling tasks that require the lifting and carrying of heavy items. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Proper Lifting Techniques (2-person lifts)	PHYSICAL STRESS	Recommended	Yes
Comments: A two-person lift is recommended for items weighing 35 pounds or more. This weight limit may be decreased based on required posture, height of lift, and other factors. The NIOSH Lifting Equation or ACGIH TLVs for Lifting Tasks should be consulted in those cases. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Supply/Material Handling	PHYSICAL STRESS			Yes	No
SEG: PSD, Police Department Rationale: The potential for physical stresses (heavy lifting) exposure occurring is minimized based on adhering to proper lifting techniques and the use of material handling equipment (carts/dollies). NIOSH's Lifting Equation or ACGIH's Lifting TLV table should be utilized for maximum weights to be lifted. Any ergonomic related injury should be reported to the unit safety representative.					

**Process: Training Operations**

Frequency: Weekly      Duration: 2-4 hours

Description: Personnel are responsible for providing training coordination and perform classroom activities including non-lethal weapons training, O.C. Spray Course, Active Shooter Training and Weapons Tactics. Personnel may be required to sit or stand for prolonged periods of time (static posture) and work outdoors for extended periods of time (heat stress and ultraviolet radiation). Personnel perform O.C. spray training several times per year outdoors.

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough.

Any ergonomic-related injury should be reported to the Command's Collateral Duty Safety Officer.

Prolonged sitting and/or standing is a NMCPHC listed reproductive/developmental hazard.

Heat stress is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			
Natural Dilution	CAPSAICIN	Recommended	Yes
Comments: O.C. spray training is conducted outdoor, natural dilution is recommended to minimize airborne exposure to capsaicin.			
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on WBGT Flag conditions and Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	CAPSAICIN	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn by the instructor when conducting O.C. spray training to minimize dermal exposure to capsaicin.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Training Operations	CAPSAICIN Inhalation			Yes	No
SEG: PSD, Police Department Rationale: An Occupational Exposure Limit (OEL) has not been established for this hazard by OSHA or Navy recognized authorities. As good practice, exposure should be minimized to the greatest degree feasible. Potential for exposure to levels of health significance is not expected based on natural dilution.					

Training Operations	HEAT STRESS			Yes	No
SEG: PSD, Police Department Rationale: The potential for heat stress occurring is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Training Operations	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD, Police Department Rationale: The potential for UV radiation issues occurring is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

## Process: Weapon Qualification

Frequency: Quarterly      Duration: 4-6 hours

Description: Personnel qualify on various weapons platforms; to include , M4s, M9s, and shotguns. Qualification activities are conducted at the MCLB Albany outdoor ranges (heat stress and ultraviolet radiation). Personnel also are responsible for cleaning their weapons after qualification. Weapons are cleaned using Cleaner, Lubricant, and Preservative (CLP) (MIL-PRF-6340). CLP (petroleum distillates) is poured onto a rag and the weapons are wiped down. PPE (suitable protective gloves) is available to be worn. Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale. Heat stress is a NMCPHC listed reproductive/developmental hazard.

### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Weapons qualification is conducted at the outdoor firing ranges at MCLB Albany, natural dilution is recommended to minimize potential airborne exposures to lead. Weapons cleaning is typically conducted outdoors after qualification, natural dilution is recommended to minimize potential airborne exposures to the CLP (petroleum distillates) used.			
Proper Hand Washing	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Proper hand washing is recommended after conducting weapons qualifications activities to minimize the potential of ingestion of lead.			
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on WBGT Flag conditions and Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Earplugs and Ear Muffs	NOISE	Required	Yes
Comments: Impulse noise from weapons firing requires double hearing protection devices (HPD) to protect workers from significant hazardous noise. Weapons firing can produce peak impulse noise in excess of the DoD standard; 140 decibels dBP. DoD requires double hearing protection for weapons firing and at ranges.			
Suitable Protective Gloves	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting weapons cleaning tasks to minimize dermal exposure to lead and the constituents of the CLP (petroleum distillates) used.			

### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Weapon Qualification	NOISE (Reproductive)	140 dBP 0 Peak OSHA		No	No
SEG: PSD, Police Department Rationale: Personnel exposure to noise in excess of the standard is expected based on exposure to noise above the OEL of 140 dBP during weapons firing.					
Weapon Qualification	HEAT STRESS			Yes	No
SEG: PSD, Police Department Rationale: The potential for heat stress occurring is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Weapon Qualification	LEAD Inhalation (Carcinogen) (Reproductive) (Ototoxin)	0.05 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on limited frequency and that exposures occur at outdoor ranges (natural dilution). Workers potentially exposed to airborne lead at any level are required to be informed of the content of Appendices A and B of 29 CFR 1910.1025 (OSHA Lead standard). Hand washing is expected to provide adequate control against transfer and ingestion of the Lead.					
Weapon Qualification	PETROLEUM DISTILLATES Inhalation	2000 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Police Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use and natural dilution (task conducted outdoors). The use of PPE provides adequate protection from skin contact.					
Weapon Qualification	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD, Police Department Rationale: The potential for UV radiation issues occurring is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

## 5. Hazards that have Special Notations

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

DIESEL EXHAUST (IARC (1)- Human Carcinogen)

GASOLINE (OSHA/NIOSH (Ca)- Carcinogen)

LEAD (IARC (2B)- Possible Human Carcinogen)

ULTRAVIOLET RADIATION (IARC (1)- Human Carcinogen)

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

CARBON MONOXIDE

GASOLINE

LEAD

## NOISE

Respiratory sensitizer: Hazard that can induce hypersensitivity of the airways following inhalation of the stressor. Work exposures to these stressors may be severe

None

Dermal sensitizer: Hazard that can induce an allergic response following skin contact with the stressor. Worker exposures to these stressors may be severe.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

None

Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

CARBON MONOXIDE

LEAD

## 6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on potential or actual exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

Process Name	SEG Name	Med Surv Program	# Process Personnel
CBRN Response	PSD, Police Department	RESPIRATOR USER CERT_PROGRAM EXAM	71
Noise Hazardous Operations	PSD, Police Department	Audiometric Testing	77
Weapon Qualification	PSD, Police Department	Audiometric Testing	77

## 7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

Entry ID	Process Name	Hazard Name	Sampling Task Type	Projected Due Date	Frequency
2188240	Noise Hazardous Operations	NOISE	Noise Dosimetry	07/31/2025	One Time

## Periodic Industrial Hygiene Survey: Shop Assessment

v1.3

Survey Date: 27 JUL 23

Shop Priority: 3 - Low

**Command: N67008 /**

**Shop: PSD, Pass and ID Office**

Location: Building 3010

**Industrial Hygienist:** Wolfe, William  
william.f.wolfe1.civ@health.mil

**Safety POC:** Peacock, Jon  
jon.peacock@usmc.mil

**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

### 1. Shop Description

#### # of Shop Personnel

Personnel are responsible for the DEERS/Rapid programs to verify eligibility for issuance of identification cards to active duty, family members, and retirees. Personnel also provides vehicle registration services, issues vehicle decals/passes, and common access cards (CAC).

6

### 2. Observations and Notes

07/27/2023

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation.

07/27/2023

Work-related musculoskeletal disorders (WMSD) risk factors which apply to all administration spaces: Personnel should ensure that all workstations are set up per attachment (4) of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.

### 3. List of Processes

Process Name	# of Process Personnel
General Housekeeping	6
Professional/Administrative Duties	6

### 4. Process Information, Controls, and Exposure Assessments

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based solely on the IH exposure assessment. Controls marked as Recommended are considered best practice by the IH to further reduce exposures based on alternate OELs or used based on an instruction/Standard Operating Procedure (SOP). Additional PPE (e.g. safety-toed shoes/boots, fall protection, safety vests, etc.) not identified in this section may be required for personnel. Consult with your cognizant Safety representative, PPE hazard assessment or local instruction/SOP/Maintenance Requirement Card (MRC) for any additional required PPE specific to your worksite.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

Process: General Housekeeping	
Frequency: Daily	Duration: 0-15 minutes
<p>Description: Personnel use household type cleaning products (Lysol (isopropanol), bleach solutions (sodium hypochlorite), Pledge (petroleum distillates), etc.) that are sprayed and wiped with paper towels or cloth rag in personal spaces. All common areas are cleaned and maintained by various personnel within each section. PPE (suitable protective gloves) is available to be worn.</p> <p>Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.</p>	

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in an office environment, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting general housekeeping to minimize dermal exposure from cleaning constituents.			

#### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
General Housekeeping	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Pass and ID Office Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					

General Housekeeping	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
SEG: PSD, Pass and ID Office Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).					

### Process: Professional/Administrative Duties

Frequency: Daily      Duration: 6-8 hours

Description: Personnel work at desks where the keyboard and mouse are placed on top of the desks. Desks had hard edges and some keyboards were not equipped with a wrist rest or gel pads in front of them. Chairs observed being used were of good ergonomic design; having adjustable height and arm rests, and adequate lumbar support. Sit-Stand workstations can be obtained if requested. WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office. Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

## 5. Hazards that have Special Notations

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

None

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

None

Respiratory sensitizer: Hazard that can induce hypersensitivity of the airways following inhalation of the stressor. Work exposures to these stressors may be severe

None

Dermal sensitizer: Hazard that can induce an allergic response following skin contact with the stressor. Worker exposures to these stressors may be severe.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

None



Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

None

## 6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on potential or actual exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

No Medical Surveillance Recommended

## 7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

No Workplace Monitoring Requested at this time.

**Periodic Industrial Hygiene Survey: Shop Assessment**

v1.3

**Survey Date:** 27 JUL 23**Shop Priority:** 2 - Medium**Command: N67008 /****Shop: PSD, Military Working Dog (MWD) Section**

Location: Building 5305

**Industrial Hygienist:** Wolfe, William  
william.f.wolfe1.civ@health.mil**Safety POC:** Peacock, Jon  
jon.peacock@usmc.mil**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

**1. Shop Description****# of Shop Personnel**

Personnel are responsible for managing the Military Work Dog program for PSD, which involves the maintenance of the kennel and handling of the working dogs.

6

**2. Observations and Notes**

07/27/2023

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation.

07/27/2023

Work-related musculoskeletal disorders (WMSD) risk factors which apply to all administration spaces: Personnel should ensure that all workstations are set up per attachment (4) of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.

**3. List of Processes**

Process Name	# of Process Personnel
Cleaning Kennels	6
General Housekeeping	6
K-9 Handling	6
Professional/Administrative Duties	6
Weapon Qualifications	6

**4. Process Information, Controls, and Exposure Assessments**

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based solely on the IH exposure assessment. Controls marked as Recommended are considered best practice by the IH to further reduce exposures based on alternate OELs or used based on an instruction/Standard Operating Procedure (SOP). Additional PPE (e.g. safety-toed shoes/boots, fall protection, safety vests, etc.) not identified in this section may be required for personnel. Consult with your cognizant Safety representative, PPE hazard assessment or local instruction/SOP/Maintenance Requirement Card (MRC) for any additional required PPE specific to your worksite.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

Process: Cleaning Kennels	
Frequency: Weekly	Duration: 1-2 hours
<p>Description: Personnel tasked with the cleaning the kennels use household bleach and Top Performance Lemon 256 soap to wash out the kennels. PPE (suitable protective gloves, suitable eye protection) is available to be worn.</p> <p>Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.</p>	

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in a well-ventilated area, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Eyewear	SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective eyewear is recommended to be worn whenever conducting kennel cleaning tasks to minimize ocular exposure from cleaning constituents.			
Suitable Protective Gloves	SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting kennel cleaning tasks to minimize dermal exposure from cleaning constituents.			

#### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Cleaning Kennels	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of the cleaners and natural dilution. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).					

**Process: General Housekeeping**

Frequency: Daily      Duration: 0-15 minutes

Description: Personnel use household type cleaning products (Lysol (isopropanol), bleach solutions (sodium hypochlorite), Pledge (petroleum distillates), etc.) that are sprayed and wiped with paper towels or cloth rag in personal spaces (to include patrol vehicles). All common areas are cleaned and maintained by various personnel within each section. PPE (suitable protective gloves) is available to be worn.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in an office environment and in patrol vehicles, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Suitable Protective Gloves	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting general housekeeping to minimize dermal exposure from cleaning constituents.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
General Housekeeping	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					
General Housekeeping	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).					

**Process: K-9 Handling**

Frequency: Daily      Duration: 8-10 hours

Description: Personnel assigned to the MWD Section, provide the day to day handling of the working dog; to include conducting all training (i.e., explosive detection, searching, obedience, etc.) and patrolling (prolonged sitting - static posture). Personnel may spend prolonged periods of time outdoors (heat stress and ultraviolet radiation) while training the working dogs. Work with and/or around K-9's has the potential for hazardous noise exposure.

MSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office.

Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

Heat stress is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on WBGT Flag conditions and Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Earplugs and/or Ear Muffs	NOISE	Required	Yes
Comments: Single hearing protection is required for noise levels at or above 85 dBA or 140 dBP. Double hearing protection is required for noise levels at or above 104 dBA or 165 dBP.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
K-9 Handling	NOISE (Reproductive)	85 dBA 8 hr TWA DoD	84.2 dBA	No	Yes
SEG: PSD, Military Working Dog (MWD) Section Rationale: Exposure to noise levels in excess of the DoD OEL of 85 dBA is anticipated based on working with K-9 working dogs, which have been measured above 85 dBA; however, previous sampling does not exceed the DoD OEL. See Noise Sampling Attachment (Attachment 3).					
K-9 Handling	HEAT STRESS			Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: The potential for heat stress occurring while conducting K-9 handling tasks is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
K-9 Handling	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: The potential for UV radiation issues occurring while conducting K-9 handling tasks is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

**Process: Professional/Administrative Duties**

Frequency: Daily      Duration: 2-4 hours

Description: Personnel work at desks where the keyboard and mouse are placed on top of the desks. Desks had hard edges and some keyboards were not equipped with a wrist rest or gel pads in front of them. Chairs observed being used were of good ergonomic design; having adjustable height and arm rests, and adequate lumbar support. Sit-Stand workstations can be obtained if requested. WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office. Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

**Process: Weapon Qualifications**

Frequency: 2-3 Times/Year      Duration: 2-4 hours

Description: Personnel qualify on various weapons platforms; to include , M4s, M9s, and shotguns. Qualification activities are conducted at the local municipality police department's outdoor ranges (heat stress and ultraviolet radiation). Personnel also are responsible for cleaning their weapons after qualification. Weapons are cleaned using Cleaner, Lubricant, and Preservative (CLP) (MIL-PRF-6340). CLP (petroleum distillates) is poured onto a rag and the weapons are wiped down. PPE (suitable protective gloves) is available to be worn.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale. Heat stress is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Weapons qualification is conducted at the outdoor firing ranges at MCLB Albany, natural dilution is recommended to minimize potential airborne exposures to lead. Weapons cleaning is typically conducted outdoors after qualification, natural dilution is recommended to minimize potential airborne exposures to the CLP (petroleum distillates) used.			
Proper Hand Washing	LEAD	Recommended	Yes
Comments: Proper hand washing is recommended after conducting weapons qualifications activities to minimize the potential of ingestion of lead.			
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on WBGT Flag conditions and Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Earplugs and Ear Muffs	NOISE	Required	No
Comments: Impulse noise from weapons firing requires double hearing protection devices (HPD) to protect workers from significant hazardous noise. Weapons firing can produce peak impulse noise in excess of the DoD standard; 140 decibels dBP. DoD requires double hearing protection for weapons firing and at ranges.			

Suitable Protective Gloves	LEAD; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting weapons cleaning tasks to minimize dermal exposure to lead and the constituents of the CLP (petroleum distillates) used.			

### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Weapon Qualifications	NOISE (Reproductive)	140 dBP 0 Peak OSHA		No	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: Personnel exposure to noise in excess of the standard is expected based on exposure to noise above the OEL of 140 dBP during weapons firing.					
Weapon Qualifications	HEAT STRESS			Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: The potential for heat stress occurring while weapons qualification is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Weapon Qualifications	LEAD Inhalation (Carcinogen) (Reproductive) (Ototoxin)	0.05 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on limited frequency and that exposures occur at outdoor ranges (natural dilution). Workers potentially exposed to airborne lead at any level are required to be informed of the content of Appendices A and B of 29 CFR 1910.1025 (OSHA Lead standard). Hand washing is expected to provide adequate control against transfer and ingestion of the Lead.					
Weapon Qualifications	PETROLEUM DISTILLATES Inhalation	2000 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use and natural dilution (task conducted outdoors). The use of PPE provides adequate protection from skin contact.					
Weapon Qualifications	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD, Military Working Dog (MWD) Section Rationale: The potential for UV radiation issues occurring while weapons qualification is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

## 5. Hazards that have Special Notations

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

LEAD (IARC (2B)- Possible Human Carcinogen)

ULTRAVIOLET RADIATION (IARC (1)- Human Carcinogen)

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

LEAD

NOISE

Respiratory sensitizer: Hazard that can induce hypersensitivity of the airways following inhalation of the stressor. Work exposures to these stressors may be severe

None

Dermal sensitizer: Hazard that can induce an allergic response following skin contact with the stressor. Worker exposures to these stressors may be severe.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

None

Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

LEAD

## 6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on potential or actual exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

Process Name	SEG Name	Med Surv Program	# Process Personnel
K-9 Handling	PSD, Military Working Dog (MWD) Section	Audiometric Testing	6
Weapon Qualifications	PSD, Military Working Dog (MWD) Section	Audiometric Testing	6

## 7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

Entry ID	Process Name	Hazard Name	Sampling Task Type	Projected Due Date	Frequency
2187628	K-9 Handling	NOISE	Noise Dosimetry	07/31/2025	One Time



**Periodic Industrial Hygiene Survey: Shop Assessment**

v1.3

**Survey Date:** 28 JUL 23**Shop Priority:** 2 - Medium**Command: N67008 /****Shop: PSD, Fire Department**

Location: Buildings 1210/1005

**Industrial Hygienist:** Wolfe, William  
william.f.wolfe1.civ@health.mil**Safety POC:** Peacock, Jon  
jon.peacock@usmc.mil**This assessment consists of the following sections:**

1. Shop Description
2. Observations and Notes
3. List of Processes
4. Process Information, Controls, and Exposure Assessments
5. Hazards that have Special Notations
6. Medical Surveillance
7. Workplace Monitoring Plan

**1. Shop Description****# of Shop Personnel**

Personnel provides firefighting and EMT medical services for Marine Corps Logistics Base (MCLB) Albany and tenant commands. They also perform basic maintenance on a variety of equipment and motor vehicles as needed. Personnel respond as part of the Hazardous Materials Spill Response team and are qualified as First Responders for Haz Mat, Haz Waste and CBRNE spills and events.

**36****2. Observations and Notes**

07/28/2023

Abbreviations: ADM – Administrative, PPE – Personal Protective Equipment, ISO – Isolation, DV – Dilution Ventilation, ENG – Engineering Controls, and LV – Local Ventilation.

07/28/2023

Work-related musculoskeletal disorders (WMSD) risk factors which apply to all administration spaces: Personnel should ensure that all workstations are set up per attachment (4) of the periodic industrial hygiene survey to help prevent WMSD issues from occurring. Gel pads or wrist rests should be employed in front of the keyboards to help maintain a neutral wrist and keep the wrists off of hard edges of the desk. As chairs are replaced, consideration should be given to purchasing adjustable ergonomic chairs. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.

**3. List of Processes**

Process Name	# of Process Personnel
Emergency/Spill Response	36
Fire Fighting	36
General Housekeeping	36
Noise Hazardous Operations	36
Patient Care/Handling	36
Professional/Administrative Duties	36
Vehicle/Equipment Fueling and Maintenance	36

## 4. Process Information, Controls, and Exposure Assessments

Chemical and physical hazards have been assessed for the processes in this shop to determine if the exposure levels are less than Occupational Exposure Limits (OELs). OELs are established to protect workers from the potential health effects due to exposures to chemical substances or physical agents. The Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits (PELs) are the regulatory OELs to which employers must comply. When appropriate, we recommend alternate, more protective OELs as a best practice.

In the Control Use column, the controls marked as Required are the minimum deemed necessary to protect workers based solely on the IH exposure assessment. Controls marked as Recommended are considered best practice by the IH to further reduce exposures based on alternate OELs or used based on an instruction/Standard Operating Procedure (SOP). Additional PPE (e.g. safety-toed shoes/boots, fall protection, safety vests, etc.) not identified in this section may be required for personnel. Consult with your cognizant Safety representative, PPE hazard assessment or local instruction/SOP/Maintenance Requirement Card (MRC) for any additional required PPE specific to your worksite.

In the Adequate column, Yes signifies the control is in place and capable of controlling exposures during the process. If Adequate is listed as No, the control is not yet in place or incapable of controlling exposures. Additional details will be provided in the comments below the control.

In the Acceptable column, Yes indicates that it is highly unlikely that the worker is exposed to the hazard at or above the OEL without regard to PPE. If Acceptable is listed as No, additional controls are required, and the shop should investigate the feasibility of reducing/eliminating the hazard. Medical Surveillance may also be required (Section 6). If Yes is listed in the Need More Data column, see the Shop's Workplace Monitoring Plan (Section 7).

When appropriate, special hazard notations are noted in the exposure assessments below. Section 5 provides notation explanations and a summary of these hazards. Exposures to these hazards should be significantly reduced by elimination, substitution, engineering controls, or work practice controls.

### Process: Emergency/Spill Response

Frequency: Special Occasions      Duration: 1-2 hours

Description: Firefighters respond to a Hazardous Materials (HAZMAT) spill or releases as needed that can range from small fuel spills to large hazardous releases and appropriate PPE is donned on a case by case basis. Personal protective equipment used by firefighters will depend on the type of chemical involved and the quantity. Firefighters are qualified to respond in bunker gear, Level A (fully encapsulating Kapplar Z500 Zytron suit with SCBA) through Level D PPE ensembles. Personnel are designated as the First Responders for chemical spills, crash occurrences and CBRNE episodes. Most responses are for gasoline/diesel and automotive fluids from vehicle accidents. The Fire Chief is normally designated as the Incident Commander. Personnel may also be required to lift and carry items that may be in excess of 35 pounds (physical stress - heavy lifting) while conducting response activities.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough.

Any ergonomic-related injury should be reported to the Command's Safety Office.

Heavy lifting is a NMCPHC listed reproductive/developmental hazard.

Heat stress is an NMCPHC listed reproductive/developmental hazard.

### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Proper Lifting Techniques (2-person lifts)	PHYSICAL STRESS	Recommended	Yes
Comments: A two-person lift is recommended for items weighing 35 pounds or more. This weight limit may be decreased based on required posture, height of lift, and other factors. The NIOSH Lifting Equation or ACGIH TLVs for Lifting Tasks should be consulted in those cases. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			
Work/Rest Cycle	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

Control Description	Hazards Controlled	Control Use	Adequate
SCBA with 45 Minute Tank	DIESEL FUEL; GASOLINE; KEROSENE	Required	Yes
Comments: SCBA with a 45-minute tank meets NFPA requirements and is required for IDLH atmospheres and those with unknown hazards to minimize potential airborne exposures during emergency/spill response activities.			
Suitable Protective Clothing	DIESEL FUEL; GASOLINE; KEROSENE	Required	Yes
Comments: Suitable protective clothing (i.e., bunker gear, full encapsulating suites, etc.) are recommended to be worn whenever conducting emergency/spill response activities to minimize dermal exposure to chemical and physical hazards associated with the response.			
Suitable Protective Gloves	DIESEL FUEL; GASOLINE; KEROSENE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting emergency/spill response activities to minimize dermal exposure to chemical hazards from the response.			

### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Emergency/Spill Response	DIESEL FUEL Inhalation (Skin)	100 mg/m3 8 hr TWA ACGIH Inhalable		No	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) could occur under emergent conditions (fires, spill responses, etc.) and will vary greatly from incident to incident. Potential exposure can be minimized by use of PPE and appropriate work practices.					
Emergency/Spill Response	GASOLINE Inhalation (Carcinogen) (Reproductive)	890 mg/m3 8 hr TWA ACGIH		No	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) could occur under emergent conditions (fires, spill responses, etc.) and will vary greatly from incident to incident. Potential exposure can be minimized by use of PPE and appropriate work practices.					
Emergency/Spill Response	KEROSENE Inhalation (Skin)	200 mg/m3 8 hr TWA ACGIH		No	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) could occur under emergent conditions (fires, spill responses, etc.) and will vary greatly from incident to incident. Potential exposure can be minimized by use of PPE and appropriate work practices.					
Emergency/Spill Response	HEAT STRESS			Yes	No
SEG: PSD - Fire Department Rationale: The potential for heat stress occurring is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Emergency/Spill Response	PHYSICAL STRESS			Yes	No
SEG: PSD - Fire Department Rationale: The potential for physical stresses (heavy lifting) exposure occurring is minimized based on adhering to proper lifting techniques and the use of material handling equipment (carts/dollies). NIOSH's Lifting Equation or ACGIH's Lifting TLV table should be utilized for maximum weights to be lifted. Any ergonomic related injury should be reported to the unit safety representative.					
Emergency/Spill Response	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD - Fire Department Rationale: The potential for UV radiation issues occurring is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

**Process: Fire Fighting**

Frequency: Daily      Duration: 2-4 hours

Description: Personnel use water, foam, and various dry chemical firefighting materials including ABC Powder (sodium bicarbonate), PKP (potassium bicarbonate) for fuel fire response, Halotron (argon, dichloro trifluoroethane) in portable units. Personnel are exposed to high temperature conditions (heat stress) from fires and may spend prolonged periods of time outdoors (heat stress and ultraviolet radiation). Personnel may also be required to lift and carry items that may be in excess of 35 pounds (physical stress - heavy lifting).

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough.

Any ergonomic-related injury should be reported to the Command's Safety Office.

Heavy lifting is a NMCPHC listed reproductive/developmental hazard.

Heat stress is a NMCPHC listed reproductive/developmental hazard.

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Proper Hydration	HEAT STRESS	Recommended	Yes
Comments: Adhering to proper hydration recommendations are adequate to minimize the potential for heat stress.			
Proper Lifting Techniques (2-person lifts)	PHYSICAL STRESS	Recommended	Yes
Comments: A two-person lift is recommended for items weighing 35 pounds or more. This weight limit may be decreased based on required posture, height of lift, and other factors. The NIOSH Lifting Equation or ACGIH TLVs for Lifting Tasks should be consulted in those cases. OPAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			
Work/Rest Cycles	HEAT STRESS; ULTRAVIOLET RADIATION	Recommended	Yes
Comments: Adhering to a work/rest cycle, based on Navy/Marine Corps policy, that allows for personnel to take breaks in shaded and/or air-conditioned spaces is adequate to minimize the potential for heat stress issues and UV radiation exposure.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
SCBA with 45 Minute Tank	CARBON MONOXIDE; HYDROGEN CYANIDE; PARTICULATES NOT OTHERWISE SPECIFIED	Required	Yes
Comments: SCBA with a 45-minute tank meets NFPA requirements and is required for IDLH atmospheres and those with unknown hazards to minimize potential airborne exposures during fire fighting response activities.			
Suitable Protective Clothing	HYDROGEN CYANIDE; PARTICULATES NOT OTHERWISE SPECIFIED	Required	Yes
Comments: Suitable protective clothing (i.e., turnout gear designed to protect firefighters from fire and heat hazards (radiant heat) and includes jackets, pants, boots, helmets and hand and face coverings that includes new "cancer initiative hoods" designed to protect the head and face from potential carcinogens) are required to be worn whenever conducting fire fighting response activities to minimize dermal exposure to chemical and physical hazards associated with the response.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Fire Fighting	CARBON MONOXIDE Inhalation (Reproductive) (Ototoxin)	55 mg/m3 8 hr TWA OSHA		No	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) could occur under emergent conditions (fires, spill responses, etc.) and will vary greatly from incident to incident. An alternate OEL exists for this stressor (ACGIH TLV 29 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed.					

Fire Fighting	HYDROGEN CYANIDE Inhalation (Skin) (Ototoxin)	11 mg/m3 8 hr TWA OSHA		No	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) could occur under emergent conditions (fires, spill responses, etc.) and will vary greatly from incident to incident. Potential exposure can be minimized by use of PPE and appropriate work practices.					
Fire Fighting	PARTICULATES NOT OTHERWISE SPECIFIED Inhalation	5 mg/m3 8 hr TWA OSHA Respirable		No	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) could occur under emergent conditions (fires, spill responses, etc.) and will vary greatly from incident to incident. Potential exposure can be minimized by use of PPE and appropriate work practices. An alternate OEL exists for this stressor (ACGIH TLV 3 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin and eye irritation.					
Fire Fighting	HEAT STRESS			Yes	No
SEG: PSD - Fire Department Rationale: The potential for heat stress occurring is minimized based adhering to proper hydration standards and rest breaks that allow personnel to rest in shaded areas and/or in air-conditioned buildings.					
Fire Fighting	PHYSICAL STRESS			Yes	No
SEG: PSD - Fire Department Rationale: The potential for physical stresses (heavy lifting) exposure occurring is minimized based on adhering to proper lifting techniques and the use of material handling equipment (carts/dollies). NIOSH's Lifting Equation or ACGIH's Lifting TLV table should be utilized for maximum weights to be lifted. Any ergonomic related injury should be reported to the unit safety representative.					
Fire Fighting	ULTRAVIOLET RADIATION (Carcinogen)			Yes	No
SEG: PSD - Fire Department Rationale: The potential for UV radiation issues occurring is minimized based adhering rest breaks that allow personnel to rest in air-conditioned buildings.					

### Process: General Housekeeping

Frequency: Daily      Duration: 1-2 hours

Description: Personnel perform various housekeeping duties in the stations, to include kitchen duties, dusting, vacuuming and mopping floors and bay areas using various household cleaners including bleach, Windex, Tilex, Pinesol, Fantastic Kitchen cleaner, Soft Scrub, oven cleaner, Vanish Bowl cleaner, stainless steel cleaner, and carpet cleaner. PPE (suitable protective gloves) is available to be worn.

Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Cleaning products are used in accordance with product directions and in an office/bunk room/open bay environments, natural dilution is recommended to minimize potential airborne exposures to cleaning products.			

#### PPE

Control Description	Hazards Controlled	Control Use	Adequate
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Suitable Protective Gloves	ISOPROPANOL; SODIUM HYPOCHLORITE	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever conducting general housekeeping to minimize dermal exposure from cleaning constituents.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
General Housekeeping	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					
General Housekeeping	SODIUM HYPOCHLORITE Inhalation	2 mg/m3 15 min STEL AIHA		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use, diluted concentration of a household cleaner and limited duration of use. The use of PPE provides adequate protection from skin contact to the sodium hypochlorite (bleach).					

**Process: Noise Hazardous Operations**

Frequency: Daily      Duration: 6-8 hours

Description: Personnel are responsible for various tasks that may require them to work with and/or around noise hazardous equipment and are potentially subject to noise levels in excess of the DoD criterion for hazardous noise of 85 dBA as an 8-Hour Time-Weighted Average while performing Fire Department operations (i.e., the use of pneumatic and power tools, operations of vehicles (engine and siren noise), etc.).

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
Earplugs and/or Ear Muffs	NOISE	Required	Yes
Comments: Single hearing protection is required for noise levels at or above 85 dBA or 140 dBP. Double hearing protection is required for noise levels at or above 104 dBA or 165 dBP.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Noise Hazardous Operations	NOISE (Reproductive)	85 dBA 8 hr TWA DoD	100.1 dBA	No	Yes
SEG: PSD - Fire Department Rationale: Exposure to noise levels in excess of the DoD OEL of 85 dBA is anticipated based on working with or in close proximity to noise hazardous equipment and previous personal noise sampling. See Noise Sampling Attachment (Attachment 3).					

**Process: Patient Care/Handling**

Frequency: Daily      Duration: 4-6 hours

Description: Personnel respond to medical emergency calls, that may include car accidents, respiratory emergencies, traumas, work related injuries, heart attacks, and allergic reactions. All personnel are trained and qualified to perform basic and intermediate EMT services, to include the application of topical antiseptics and cleaning wounds (isopropanol). Qualified paramedics (advanced) can administer certain drugs onsite as needed. Personnel often have to lift and assist patients at the scene. Personnel may also be exposed to blood and/or body fluids during response activities.

WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough.

Any ergonomic-related injury should be reported to the Command's Safety Office.

Heavy lifting is a NMCPHC listed reproductive/developmental hazard.

**Engineering**

Control Description	Hazards Controlled	Control Use	Adequate
Wheeled Stretchers	PHYSICAL STRESS	Recommended	Yes
Comments: The use of wheeled stretchers is recommended to minimize ergonomic hazard during patient care and handling tasks that require the lifting and carrying of heavy items. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	ISOPROPANOL	Recommended	Yes
Comments: Topical antiseptics and disinfectants are used in accordance with product directions and in rear of ambulances and/or outdoors, natural dilution is recommended to minimize airborne exposures to these products.			
Proper Lifting Techniques (2-person lifts)	PHYSICAL STRESS	Recommended	Yes
Comments: A two-person lift is recommended for items weighing 35 pounds or more. This weight limit may be decreased based on required posture, height of lift, and other factors. The NIOSH Lifting Equation or ACGIH TLVs for Lifting Tasks should be consulted in those cases. OPNAV M-5100.23 stipulates an Ergonomics Program is the Command's responsibility.			
Universal Precautions	BLOODBORNE PATHOGENS	Recommended	Yes
Comments: Adhering to universal precaution protocols are recommended to minimize potential dermal exposure to bloodborne pathogens.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
N-95 Respirator	Airborne Infectious Disease	Recommended	Yes
Comments: N-95 respirators are recommended to be worn whenever providing patient care and/or handling to minimize airborne exposure to potential airborne infectious diseases.			
Suitable Protective Gloves	BLOODBORNE PATHOGENS; ISOPROPANOL	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever applying topical antiseptics or disinfectants, and/or administering blood draws or administering immunizations to minimize dermal exposure to the topical antiseptics/disinfectant products and/or bloodborne pathogens.			

**Exposure Assessment**

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Patient Care/Handling	Airborne Infectious Disease Inhalation			Yes	No

SEG: PSD - Fire Department

Rationale: An Occupational Exposure Limit (OEL) has not been established for this hazard by OSHA or Navy recognized authorities. As good practice, exposure should be minimized to the greatest degree feasible. Potential for exposure to levels of health significance is not expected based on the frequency of the task and natural dilution.

Patient Care/Handling	BLOODBORNE PATHOGENS Skin and/or Eye Contact			Yes	No
SEG: PSD - Fire Department Rationale: No significant exposure is expected based on the frequency of the process and following universal precaution protocols. The use of PPE provides adequate protection from skin contact to bloodborne pathogens.					
Patient Care/Handling	ISOPROPANOL Inhalation	980 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on method of use and natural dilution. An alternate OEL exists for this stressor (ACGIH TLV 492.0 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed. The use of PPE provides adequate protection from skin contact to isopropanol.					
Patient Care/Handling	PHYSICAL STRESS			Yes	No
SEG: PSD - Fire Department Rationale: The potential for physical stresses (heavy lifting) exposure occurring is minimized based on adhering to proper lifting techniques and the use of material handling equipment (carts/dollies). NIOSH's Lifting Equation or ACGIH's Lifting TLV table should be utilized for maximum weights to be lifted. Any ergonomic related injury should be reported to the unit safety representative.					

### Process: Professional/Administrative Duties

Frequency: Daily      Duration: 2-4 hours

Description: Personnel work at desks where the keyboard and mouse are placed on top of the desks. Desks had hard edges and some keyboards were not equipped with a wrist rest or gel pads in front of them. Chairs observed being used were of good ergonomic design; having adjustable height and arm rests, and adequate lumbar support. Sit-Stand workstations can be obtained if requested. WMSD RISK FACTORS: No ergonomic-related injuries/problems directly related to work were reported during the survey walkthrough. Any ergonomic-related injury should be reported to the Command's Safety Office. Excessive sitting (static posture) is a NMCPHC listed reproductive/developmental hazard.

#### Administrative

Control Description	Hazards Controlled	Control Use	Adequate
Micro Breaks	Static Posture	Recommended	Yes
Comments: Micro breaks are recommended to minimize identified ergonomic hazards. OPNAV M-5100.23 stipulates an ergonomics program is a command responsibility.			

### Process: Vehicle/Equipment Fueling and Maintenance

Frequency: Daily      Duration: 1-2 hours

Description: Personnel fuel and perform maintenance on the fire engine, vehicles and gas-powered equipment. They use 2-cycle oil for some small engine equipment, bar & chain oil for the chain saws, and other lubricants during equipment and vehicle checks. Personnel fill small gas tanks for gasoline/diesel powered equipment. PPE (suitable protective gloves and suitable protective eyewear) is available to be worn.  
 Note: While administrative, PPE, and/or engineering controls, along with the exposure assessment sections below may reflect a limited subset of hazard(s) under "Hazard Name", all products with similar hazards used under this process should follow the same controls and reflects the same exposure assessment acceptability and rationale.

#### Engineering

Control Description	Hazards Controlled	Control Use	Adequate
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Hood/Booth - Station 1 LEV #1	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-014) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			
Hood/Booth - Station 1 LEV #2	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-014) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			
Hood/Booth - Station 1 LEV #3	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-014) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			
Hood/Booth - Station 1 LEV #4-Left	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-014) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			
Hood/Booth - Station 1 LEV #4-Right	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-014) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			
Hood/Booth - Station 2 LEV #1	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-015) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			
Hood/Booth - Station 2 LEV #2	CARBON MONOXIDE; DIESEL EXHAUST	Recommended	No
Comments: Local exhaust ventilation is recommended to minimize airborne exposures to vehicle exhaust constituents while trucks are idled and/or run indoors. Note: The most recent ventilation surveys (ALBVE23014-015) the ventilation systems were damaged and not functioning. Administrative controls have been instituted to mitigate the situation until the ventilation can be repaired.			

**Administrative**

Control Description	Hazards Controlled	Control Use	Adequate
Natural Dilution	CARBON MONOXIDE; DIESEL EXHAUST; DIESEL FUEL; GASOLINE; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Due to the local exhaust ventilation systems not functioning at the stations, vehicles and equipment are operated and maintained outdoors only, natural dilution is recommended to minimize the potential airborne exposures to vehicle/equipment exhaust constituents and the various lubricants used. Fueling of vehicles/equipment is typically conducted outdoors; natural dilution is recommended to minimize airborne exposure to gasoline or diesel fuel.			

**PPE**

Control Description	Hazards Controlled	Control Use	Adequate
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Suitable Protective Eyewear	DIESEL FUEL; GASOLINE; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Suitable protective eyewear is recommended to be worn whenever refueling vehicles/equipment (gasoline and diesel) and conducting maintenance (petroleum distillates) to minimize ocular exposure to the fuels and constituents of maintenance products.			
Suitable Protective Gloves	DIESEL FUEL; GASOLINE; PETROLEUM DISTILLATES	Recommended	Yes
Comments: Suitable protective gloves are recommended to be worn whenever refueling vehicles/equipment (gasoline and diesel) and conducting maintenance (petroleum distillates) to minimize dermal exposure to the fuels and constituents of maintenance products.			

### Exposure Assessment

Process Name	Hazard Name	OEL	Exposure Level	Acceptable	Need More Data
Vehicle/Equipment Fueling and Maintenance	CARBON MONOXIDE Inhalation (Reproductive) (Ototoxin)	55 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not anticipated based on the adherence to administrative controls and natural dilution. An alternate OEL exists for this stressor (ACGIH TLV 29 mg/m3). Whenever possible work to reduce exposures to this level through the use of engineering and work practice controls. See Control Section for recommendations. Contact your IH program office for assistance as needed.					
Vehicle/Equipment Fueling and Maintenance	DIESEL EXHAUST Inhalation (Carcinogen)			Yes	No
SEG: PSD - Fire Department Rationale: An Occupational Exposure Limit (OEL) has not been established for this hazard by OSHA or Navy recognized authorities. As good practice, exposure should be minimized to the greatest degree feasible. Potential for exposure to levels of health significance is not expected based on the adherence to administrative controls and natural dilution.					
Vehicle/Equipment Fueling and Maintenance	DIESEL FUEL Inhalation (Skin)	100 mg/m3 8 hr TWA ACGIH Inhalable		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not anticipated based on natural dilution (fueling occurs outdoors). The use of PPE provides adequate protection from skin and eye contact.					
Vehicle/Equipment Fueling and Maintenance	GASOLINE Inhalation (Carcinogen) (Reproductive)	890 mg/m3 8 hr TWA ACGIH		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not anticipated based on natural dilution (fueling occurs outdoors). The use of PPE provides adequate protection from skin and eye contact.					
Vehicle/Equipment Fueling and Maintenance	PETROLEUM DISTILLATES Inhalation	2000 mg/m3 8 hr TWA OSHA		Yes	No
SEG: PSD - Fire Department Rationale: Potential for airborne concentrations greater than the applicable Occupational Exposure Limit (OEL) is not expected based on adherence to administrative controls and natural dilution. The use of PPE provides adequate protection from skin contact.					

## 5. Hazards that have Special Notations

The following is a summary of hazards found to be in use in this Shop that have one or more of the following notations: Carcinogen, Reproductive, Sensitizer, Skin, or Ototoxin. These notations are provided next to the hazard names in Section 4, Chemical and Physical Hazards Exposure Assessments. Exposure to these hazards should be significantly reduced by elimination, substitution, or through work practice and engineering controls.

Carcinogen: A Carcinogen is a hazard capable of causing cancer.

DIESEL EXHAUST (IARC (1)- Human Carcinogen)  
 GASOLINE (OSHA/NIOSH (Ca)- Carcinogen)  
 ULTRAVIOLET RADIATION (IARC (1)- Human Carcinogen)

Reproductive: Hazards identified with the Reproductive notation are those associated with occupational exposures regarding their potential to cause an adverse effect on reproductive health or fetal development. Pregnant workers and/or workers concerned about their future reproductive capacity should seek the advice of their medical provider before working in an environment that contains reproductive hazards.

CARBON MONOXIDE  
 GASOLINE  
 NOISE

Respiratory sensitizer: Hazard that can induce hypersensitivity of the airways following inhalation of the stressor. Work exposures to these stressors may be severe

None

Dermal sensitizer: Hazard that can induce an allergic response following skin contact with the stressor. Worker exposures to these stressors may be severe.

None

Skin: This notation refers to the potential significant contribution to a worker's overall exposure by the cutaneous route, including mucous membranes and the eyes, by contact with vapors, liquids, and solids. A Skin notation is not applied to chemicals that solely cause dermal irritation.

DIESEL FUEL  
 HYDROGEN CYANIDE  
 KEROSENE

Ototoxin: Ototoxic chemicals either cause hearing loss independently, or work synergistically with hazardous noise to damage the inner ear. Regardless of the mechanism, exposure to certain chemicals, either alone or in concert with noise, results in hearing loss.

CARBON MONOXIDE  
 HYDROGEN CYANIDE

## 6. Medical Surveillance

The following are exposure based medical surveillance program recommendations. Workers are included in medical surveillance programs based on several factors: 1) unacceptable exposure assessments, 2) frequency of exposure, and 3) the availability of surveillance criteria. The decision to include a worker in a program is based on potential or actual exposure at or above a regulatory action level, if OSHA has established one. The decision may also be driven by other exposure standards, policy and guidance from the DoD or Navy. The only certification exam recommended in the IH Survey is for Respirator Users.

Process Name	SEG Name	Med Surv Program	# Process Personnel
Emergency/Spill Response	PSD - Fire Department	RESPIRATOR USER CERT_PROGRAM EXAM	36
Fire Fighting	PSD - Fire Department	RESPIRATOR USER CERT_PROGRAM EXAM	36
Noise Hazardous Operations	PSD - Fire Department	Audiometric Testing	36

## 7. Workplace Monitoring Plan

Processes listed below require initial and/or periodic exposure monitoring to determine if levels are controlled to below the Occupational Exposure Limits. In order to fulfill this requirement, your assistance in scheduling monitoring is needed by notifying the Industrial Hygiene Department at least 48 hours in advance of the next operation.

Entry ID	Process Name	Hazard Name	Sampling Task Type	Projected Due Date	Frequency
2189108	Noise Hazardous Operations	NOISE	Noise Dosimetry	07/31/2025	One Time

Entry ID	Vent Task Description	Location Name	Projected Due Date	Frequency
1602384	PSD-Fire Dept-Station 1-Bay 4	1210	02/29/2024	Yearly
2188961	PSD-Fire Station-Station 1 Vehicle Exhaust 2024/02/01	1210	02/29/2024	Yearly
2188964	PSD-Fire Station-Station 2 Vehicle Exhaust 2024/02/01	1005	02/29/2024	Yearly

**RESULTS OF EVALUATIONS OF INDUSTRIAL VENTILATION SYSTEMS  
USED FOR STRESSOR CONTROL  
MARINE CORPS LOGISTICS BASE (MCLB) ALBANY  
PUBLIC SAFETY DIVISION (PSD)  
ALBANY, GA  
REPORT NUMBER: AL23010  
JULY 2023**

Ref: (a) *American Conference of Governmental Industrial Hygienists, Industrial Ventilation: A Manual of Recommended Practice for Design, 31<sup>st</sup> Edition, 2023*

## **1. Background**

a. Providing adequate mechanical exhaust ventilation to control stressors (i.e., chemical substances and physical agents that are harmful to personnel) is known as Industrial Ventilation and is essential to protecting the health of personnel. This is especially true in interior spaces where stressors can build up if not properly exhausted. The assessment of ventilation systems for comfort (i.e., Heating, Ventilating, and Air-Conditioning (HVAC) systems) is outside the scope of this survey.

b. Industrial ventilation falls into two categories: general (or dilution) ventilation and local exhaust ventilation (LEV). Dilution ventilation is the dilution of contaminated air with uncontaminated air for the purpose of controlling potential airborne health hazards, fire and explosive conditions, odors, and other contaminants. Dilution ventilation is not as effective for health hazard control as is local exhaust ventilation. Local exhaust ventilation is preferred for industrial processes since it removes stressors at their source before they mix with the air in the space. To function properly industrial ventilation requires an adequate amount of both exhaust and supply (i.e., make-up/replacement) air.

c. An industrial hygienist or other qualified personnel under their direction may conduct ventilation assessments. Results of the measurement of local exhaust ventilation systems used for contaminant control are reported in either feet per minute (fpm) (e.g., for slot velocities or capture velocities) or cubic feet per minute (CFM) (e.g., for total system performance) while dilution ventilation is usually reported as either air changes per hour (ACH) or the rate of change in minutes. ACH is the number of times per hour that a volume of air equal to the internal volume of the space is removed. Rate of change is the number of minutes that it takes to exhaust a volume of air equal to the internal volume of the space.

**2. Summary of Findings:** The following is a summary of ventilation findings:

SHOP/ LOCATION	SYSTEM TESTED	SAMPLE # MEASUREMENTS 2023	STANDARDS	STANDARDS MET
Fire Department Station #1	Bay #1 LEV	Not Operational	Ref. (a), Print No. VS-85-01 Tailpipe Exhaust Ventilation	<b>NO</b>
	Bay #2 LEV	Not Operational		<b>NO</b>
	Bay #3 LEV	Not Operational	Recommended 1307-1666 cfm	<b>NO</b>

SHOP/ LOCATION	SYSTEM TESTED	SAMPLE # MEASUREMENTS 2023	STANDARDS	STANDARDS MET
Fire Department Station #1	Bay #4 LEV	Not Operational	Ref. (a), Print No. VS-85-01 Tailpipe Exhaust Ventilation	<b>NO</b>
Fire Department Station #2	Bay #1 LEV	Not Operational		<b>NO</b>
	Bay #2 LEV	Not Operational	Recommended 1307-1666 cfm	<b>NO</b>

3. All ventilation components did not meet the recommended range for exhaust flow rate of 1307-1666 cfm. Make all necessary repairs and ensure that all preventive maintenance is conducted in accordance with the applicable guidelines to ensure maximum effectiveness of the various systems in use. Continue

4. Ventilation surveys will continue to be performed as required. Original ventilation survey sample sheets are on file in the Industrial Hygiene Department office.

5. Please contact the Industrial Hygiene Department (904-546-7033), should there be any action taken on the existing systems that will alter (improve/reduce) the airflow so that new measurements can be taken.

**NOISE SURVEY WITH HEARING PROTECTION REQUIREMENTS  
AND PERSONAL NOISE SAMPLING RESULTS SUMMARY  
MARINE CORPS LOGISTICS BASE (MCLB) ALBANY  
PUBLIC SAFETY DIVISION (PSD)  
ALBANY, GA  
REPORT NUMBER: AL23010  
JULY 2023**

Ref: (a) OPNAV M-5100.23 of 05 Jun 2020, *Navy Safety and Occupational Health Manual*  
(b) DoD Instruction 6055.12, *Hearing Conservation Program*, 14 August 2019  
(c) Marine Corps Hearing Conservation Program, MCO 6260.3A, 26 Sept 2016.

1. The following table identifies spaces, work tasks and equipment that require the use of hearing protection. These measurements were taken during the current or previous industrial hygiene (IH) surveys. All personnel working in areas or performing tasks that are exposed to sound pressure (noise) levels at or above **85 dBA** or **140 dBP** must use single hearing protection. Personnel exposed to sound pressure (noise) levels at or above **104 dBA** or **165 dBP** require the use of double hearing protection, as indicated by the word "Double" in the "Level of Hearing Protection Required" column. The hearing protective devices used must be capable of attenuating worker noise exposure below an 8-hour TWA of 85 dBA.

<b>IDENTIFIED NOISE HAZARD AREA, OPERATIONS AND EQUIPMENT</b>						
<b>DATE SAMPLE #</b>	<b>RESPONSIBLE WORKCENTER</b>	<b>SPACE</b>	<b>WORK TASK AND/OR CONDITIONS</b>	<b>MEASURED SOUND PRESSURE LEVELS (dBA)</b>	<b>NOISE RADIUS (FT)</b>	<b>HEARING PROTECTION REQUIRED</b>
01/25/2018 NS18042	Police Department	Gate Security	Commercial Truck - Air Brakes	90	unknown	<b>Single</b>
01/25/2018 NS18041			Commercial Truck - Air Brakes	83	--	
01/25/2018 NS18040			Heater – Dyno Glo Elux	91	unknown	<b>Single</b>
01/25/2018 NS18039			Civilian Police Security – Orange Barrier/Guard Shack	87	unknown	<b>Single</b>
01/25/2018 NS18038			Civilian Police Security – Orange Barrier/Guard Shack	84	--	None
01/25/2018 NS18037			Civilian Police Security – Orange Barrier/Guard Shack	80	--	None
01/25/2018 NS18036			Civilian Police Security – Orange Barrier/Guard Shack	81	--	None
01/25/2018 NS18035			Commercial Truck - Air Brakes	98	unknown	<b>Single</b>
01/25/2018 NS18034			Commercial Truck - Air Brakes	101	unknown	<b>Single</b>
01/25/2018 NS18033			Commercial Truck - Air Brakes	95	unknown	<b>Single</b>
01/25/2018 NS18032			Commercial Truck - Air Brakes	97	unknown	<b>Single</b>

<b>IDENTIFIED NOISE HAZARD AREA, OPERATIONS AND EQUIPMENT</b>						
<b>DATE SAMPLE #</b>	<b>RESPONSIBLE WORKCENTER</b>	<b>SPACE</b>	<b>WORK TASK AND/OR CONDITIONS</b>	<b>MEASURED SOUND PRESSURE LEVELS (dBA)</b>	<b>NOISE RADIUS (FT)</b>	<b>HEARING PROTECTION REQUIRED</b>
01/25/2018 NS18031	Police Department	Gate Security	Civilian Police Security – Orange Barrier/Guard Shack	84	--	None
01/25/2018 NS18030			Civilian Police Security – Orange Barrier/Guard Shack	86	unknown	<b>Single</b>
01/25/2018 NS18029			Heater – Dyno Glo Elux	86	unknown	<b>Single</b>
01/25/2018 NS18028			Civilian Police Security – Orange Barrier/Guard Shack	83	--	None
02/01/2018 NS18043	MWD Section	Kennel Building	Feeding Multiple Dogs	97	unknown	<b>Single</b>
01/26/2018 NS18044			Dog Feeding	93	unknown	<b>Single</b>
01/26/2018 NS18045			Feeding Single Dog	90	unknown	<b>Single</b>
01/26/2018 NS18047			Training Fields at Kennel Entrance	93	unknown	<b>Single</b>
01/26/2018 NS18046			Office when dogs are barking	70	--	None
02/08/2018 NS18079			Release Dogs	82	--	None
02/08/2018 NS18080			Kennel Cleaning and Sanitizing-Hallway	84	--	None
02/08/2018 NS18081			Kennel Cleaning and Sanitizing-Office	71	--	None
20/25/2020 NA*	Fire Department	Fire Stations	Rescue 1-Siren, door closed	86	unknown	<b>Single</b>
20/25/2020 NA*			Blower-Craftsman, electric	96.4	unknown	<b>Single</b>
20/25/2020 NA*			Station 2-Fire Truck outside of station	80.6	--	None
20/25/2020 NA*			Rescue 1-Inside Fire Station	82.3	--	None
20/25/2020 NA*			Rescue saw -KW12 Husqvarna	107.9	unknown	<b>Double</b>
20/25/2020 NA*			Chainsaw-Stihl Rollamatic	111.5	unknown	<b>Double</b>
20/25/2020 NA*			Station 2-Fire Truck, siren	97.2	unknown	<b>Single</b>
20/25/2020 NA*			Station 2-Fire Truck, airhorn	120	unknown	<b>Double</b>
20/25/2020 NA*			Station 2-Fire Truck, Mech siren	93.8	unknown	<b>Single</b>
20/25/2020 NA*			Sprayer System-Hale, outside	92.4	unknown	<b>Single</b>
20/25/2020 NA*			Rescue 1-Siren, front of vehicle	129	unknown	<b>Double</b>
20/25/2020 NA*			PA System-All Call	80.8	--	None
20/25/2020 NA*			Station 2-Fire Truck, Panel	92.5	unknown	<b>Single</b>



IDENTIFIED NOISE HAZARD AREA, OPERATIONS AND EQUIPMENT						
DATE SAMPLE #	RESPONSIBLE WORKCENTER	SPACE	WORK TASK AND/OR CONDITIONS	MEASURED SOUND PRESSURE LEVELS (dBA)	NOISE RADIUS (FT)	HEARING PROTECTION REQUIRED
20/25/2020 NA*	Fire Department	Fire Stations	Fire Engine 3-Siren, front of vehicle	115.3	unknown	Double
20/25/2020 NA*			Station 2-Fire Truck, Panel	90	unknown	Single
20/25/2020 NA*			Jaws of Life-Hurst	87.9	unknown	Single
20/25/2020 NA*			Station 2-Fire Truck, electric siren	123.7	unknown	Double
20/25/2020 NA*			Station 2-Fire Truck, Mech siren	127.4	unknown	Double
20/25/2020 NA*			Fire Engine 3-Insidie Fire Station	85.4	unknown	Single
20/25/2020 NA*			Rescue 1-Siren, in cab/door open	112.5	unknown	Double
20/25/2020 NA*			Station 2-Fire Truck, airhorn inside	93.5	unknown	Single
20/25/2020 NA*			Medic 2-Inside Fire Station	82.3	--	None
20/25/2020 NA*			Fire Engine 3-Siren, in bay	123.7	unknown	Double
20/25/2020 NA*			Rescue 1-in Cab	74	--	None
*NA – Sample date and/or sample number unavailable						

2. The personal sampling results listed below indicated personnel have had exposures that exceeded the DoD OEL or 85 dBA. Personnel should remain in the command's Hearing Conservation Program.

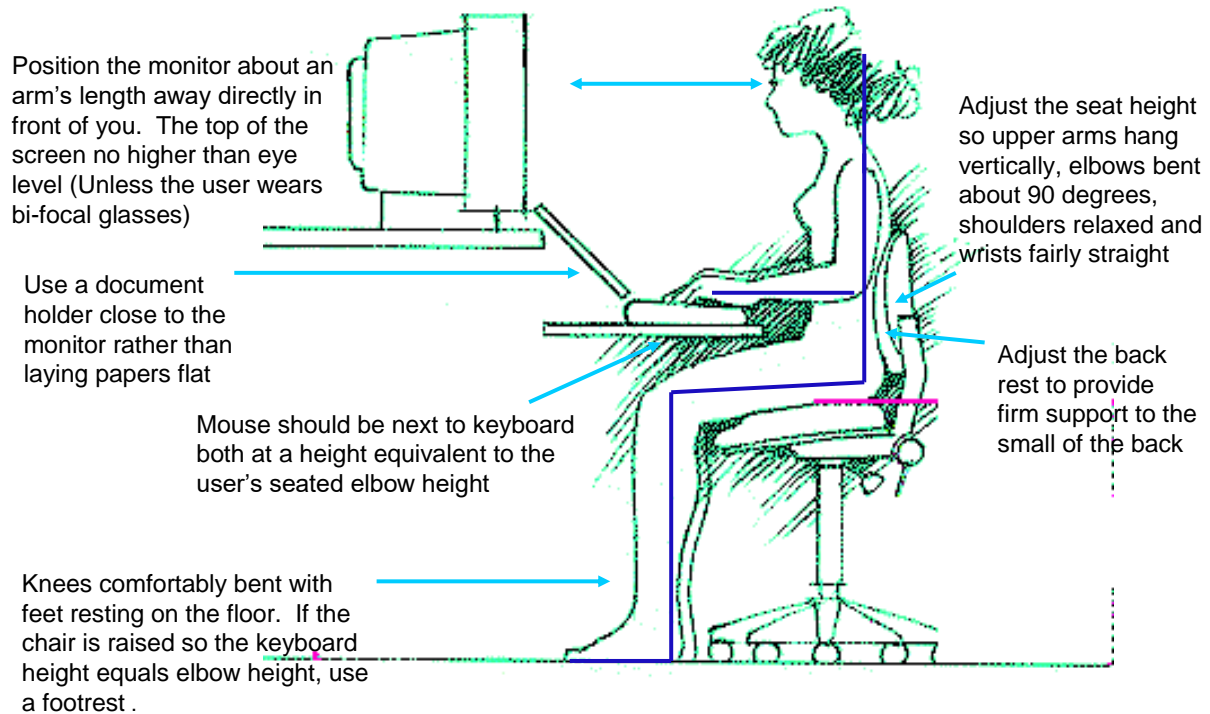
PUBLIC SAFETY DIVISION (PSD) PERSONNEL NOISE SAMPLING RESULTS					
DATE SAMPLE #	WORK CENTER	ACTIVITY	EXPOSURE LIMIT	MEASURED TWA EXPOSURE	RESULTS
01/16/2018 ND18028	MWD Section	K9 Handling	85	84.2	Below DoD OEL
01/26/2018 ND18031				82.9	Below DoD OEL
02/08/2018 ND18032				75.8	Below DoD OEL
01/24/2018 ND18029	Police Department	Gate Security	85	83.2	Below DoD OEL
01/25/2018 ND18030				82.8	Below DoD OEL
01/15/2019 ND19024				<b>87.0</b>	<b>Above DoD OEL</b>
01/15/2019 ND19025				83.5	Below DoD OEL
09/22/2015 ALBND15076	Fire Department	Station Duties	85	<b>100.1</b>	<b>Above DoD OEL</b>

3. At the discretion of Industrial Hygiene, additional noise measurements (sound level surveys) may be obtained in work centers or noise dosimetry (personal monitoring on individuals) performed to resolve compliance issues such as the posting of hazardous noise areas, the adequacy of hearing protection devices already in use, or implementing administrative controls to bring the effective exposure to less than the DoD OEL.

4. The hearing protection devices currently in use are capable of attenuating worker noise exposure below the OEL. It is recommended that the Command re-emphasize the need for wearing appropriate hearing protection during whenever operating noise hazardous equipment and continued enrollment in the command Hearing Conservation Program (per reference (c)) should continue. Should tasks change such that worker noise exposures are affected, notify Industrial Hygiene so that another assessment can be conducted.

5. The original sample results discussed in this attachment are on file with the Industrial Hygiene office. The workers have been notified of their sample results and the results have been recorded in their individual medical records. At this time there are no additional recommendations to be made.

# Neutral Posture for Computer Use



# TIME TO TAKE A COMPUTER BREAK

For every 20 minutes of computer use,  
look at an object 20 feet away for  
20 seconds. This reduces eyestrain.

Move your eyes side-to-side and  
top to bottom. This helps moisten  
your eyes and reduces eyestrain.

Cup your eyes with your hands  
and close your eyes. Do not put  
any direct pressure on your eyes.  
This relaxes your face and  
moistens your eyes.

Rotate your ankle. This promotes  
blood circulation in your legs.

While seated, elongate your back  
by pretending there is a cable  
attached to your head that is slowly  
pulling upwards. This will promote  
good posture and relieve some  
low back pain.

Slowly pull your arms back as far as  
you can, trying to touch your shoulder  
blades together. This will reduce  
upper back stress.

Close your eyes and gradually  
lower your head. This relaxes  
your eyes and neck.

Extend your arms and fingers  
and rotate. This reduces stress  
on the upper extremities.

With your arms at your sides,  
shake your fingers. This  
relaxes your arms, hands  
and fingers.

Shrug your shoulders. This eliminates  
stress from the shoulders and upper back.

**Tip:** Taking 20 second micro-breaks throughout the day to refocus your eyes will reduce fatigue at the end of the day. 20/20 rule: for every 20 minutes of work, rest the eyes 20 seconds.

# CUSTOMER SATISFACTION SURVEY

Industrial Hygiene Department  
Navy Medicine Readiness and Training Command Jacksonville

Command: \_\_\_\_\_ Date: \_\_\_\_\_

Please rate this survey and report by indicating the numbers below that reflect your level of satisfaction:

	Level of Satisfaction				
	Low				High
	1	2	3	4	5
1. Coordination and/or response to request					
2. Courtesy and professionalism of IH personnel					
3. IH personnel's ability to communicate clearly and openly					
4. Clarity of Report					
5. Usefulness of Report					
6. Exposure Monitoring (if applicable)					
7. Timeliness of Report					

8. How can we improve the services we are providing?

9. What other services would you like Industrial Hygiene Services to provide?

10. Additional Comments (add a separate sheet if necessary):

Name: \_\_\_\_\_ Position: \_\_\_\_\_ Shop/Codes: \_\_\_\_\_

PLEASE RETURN THIS SURVEY TO:

Head, Industrial Hygiene Department  
Navy Medicine Readiness and Training Command Jacksonville  
george.a.moeller2.civ@health.mil

**THANKS!!!**

Attachment (5)