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DEPARTMENT OF THE ARMY

US ARMY INSTITUTE OF PUBLIC HEALTH 5158 BLACKHAWK ROAD ABERDEEN PROVING GROUND MARYLAND 21010-5403

MCHB-IP-RDE 5 November 2013

MEMORANDUM FOR Office of the Command Surgeon (LTC (b) (6)), U.S. Central Command, 7115 South Boundary Boulevard, MacDill Air Force Base, FL 33621-5101

SUBJECT: Deployment Occupational and Environmental Health Surveillance Sample Report, Airborne Volatile Organic Compounds, Dash-E-Towp, Afghanistan, 7 May 2013, U_AFG_DASHETOWP_IP_A17_20130507

- 1. The enclosed report details the assessment of two volatile organic compound air samples collected by 788th Medical Detachment personnel, Dash-E-Towp, Afghanistan, 7 May 2013.
- 2. None of the chemicals detected in the samples were identified as potential hazards.

FOR THE DIRECTOR:

Encl

(b) (6)

Portfolio Director, Health Risk Management

CF: (w/encl)
788th MED DET (Commander/MAJ (b) (6)
ARCENT (Chief Force Health Protection/COL (b) (6)
USAFSAM (Chief, Special Projects/Maj (b) (6)
USFOR-A (Force Health Protection Officer/MAJ (b) (6)

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Deployment Occupational and Environmental Health Surveillance Sample Report, U_AFG_DASHETOWP_IP_A17_20130507 Health Risk Management Portfolio

Airborne Volatile Organic Compounds, Dash-E-Towp, Afghanistan

Prepared by (b) (6)
Deployment Environmental Surveillance Program

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Preventive Medicine Surveys: 40-5f1

ACKNOWLEDGEMENTS

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1 References

See Appendix A for a list of references.

2 Purpose

This report provides the U.S. Army Public Health Command (USAPHC), Army Institute of Public Health (AIPH) assessment of the laboratory analytical results and exposure information associated with the samples collected by 788th Medical Detachment personnel on 7 May 2013 at Dash-E-Towp, Afghanistan according to the U.S. Department of Defense deployment occupational and environmental health (DOEH) surveillance requirements. The assessment serves several purposes. It identifies DOEH hazards that may be related to acute health effects that could occur in personnel during their deployment. It provides an official record of observed exposure conditions for use in future site evaluations. Finally, this report includes preventive steps to reduce or eliminate occupational and environmental exposures, and surveillance and/or sampling recommendations, as necessary.

3 Scope

The assessment of sample results and exposure information in this report follows the process published in the USAPHC Technical Guide (TG) 230 "Environmental Health Risk Assessment and Chemical Exposure Guidelines for Deployed Military Personnel, June 2010 Revision." The assessment is based on limited data representing a specific time period and assesses short-term exposure risks only. Therefore, this report cannot be used alone to estimate the risk of chronic health effects from exposures. In addition, this assessment does not address all DOEH hazards to which U.S. personnel may be exposed.

4 Laboratory Analysis

These deployment air samples were analyzed at the USAPHC, AIPH laboratory for a standard set of volatile organic compounds (VOCs). The complete analytical sample results can be viewed in the Defense Occupational and Environmental Health Readiness System (DOEHRS). Log into the DOEHRS and search for the samples using the DOEHRS sample identification numbers (IDs) provided in Table 1.

DOEH Surveillance Sample Report, Airborne VOCs, Dash-E-Towp, Afghanistan, 7 May 13, U_AFG_DASHETOWP_IP_A17_20130507

Table 1. Sample Identification Information

DOEHRS Sample ID	Sample ID Reported on Field Data Sheet	Sample Site	Date and Time Sample Collected	Sampling Duration	Sample Invalid (Yes/No) Reason for Invalid Sample
000095R1	AFG_DASHET_2 0130507_DVS01	Aid Station Entrance by Main Road	2013/05/07 1012	480.0 minutes	No
000099DW	AFG_DASHET_2 0130507_DVS02	Aid Station Entrance by Main Road	2013/05/07 1012	480.0 minutes	No

5 Exposure Setting

Table 2 contains information about the sampling location, environmental conditions, and associated potential population exposure. The information was provided on the field data sheets and/or exposure assessment worksheet submitted with the samples unless otherwise noted. Correction and clarification of exposure assumptions by the sampling unit is encouraged.

Table 2. Exposure Information

Questions About Exposure	Information Provided and Assumptions		
Why was this sample/sample set collected?	Routine samples were collected to assess the		
Titty that the tample, tample tot temester.	general exposure to personnel.		
	All personnel are exposed to the ambient air.		
What population is exposed and how?	However, it is assumed that personnel spend part		
	of each day indoors.		
What is the timeframe under consideration?	This combat outpost will close in July.		
Where was the sample/sample set	The sample was collected from the entrance to the		
collected?	aid station by the main road.		
What is known about location, activity,	Burn pits are located just outside the perimeter.		
setting and potential sources of	Vehicle activity on the main road produces exhaust		
contamination that may affect exposure?	and airborne dust.		

6 Prescreen

None of the chemicals were detected in the samples, and therefore no potential hazards were identified. The prescreening is conducted as described in USAPHC TG 230, section 3.4.3. The sample results were compared to MEGs on 11 July 2013.

7 Limitations

7.1 Field Data Quality

Field data provided with the samples were adequate.

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7.2 Sample Receipt at USAPHC Laboratory

The sample set was received at the USAPHC at a temperature of 22 degrees Celsius. The samples were packaged correctly.

7.3 Laboratory Data Quality

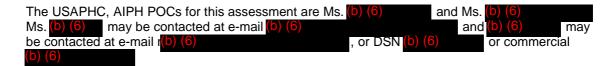
No laboratory data quality issues associated with this sample set were identified.

8 Recommendations

Maintain communication with USAPHC, AIPH points of contact (POCs) and continue standard surveillance of airborne VOCs in accordance with defined Occupational and Environmental Health Site Assessment (OEHSA) exposure pathways and sampling plans for your location.

An OEHSA was completed for Dash-E-Towp, Afghanistan on 23 May 2013. Update the OEHSA annually or as the exposure scenario changes.

9 Points of Contact



Program

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Biologist

Deployment Environmental Surveillance

Approved by:



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Appendix A

References

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- Department of the Army. 2006. Field Manual 5-19, Composite Risk Management. https://rdl.train.army.mil/soldierPortal/atia/adlsc/view/public/23137-1/FM/5-19/TOC.HTM
- U.S. Army Public Health Command (Provisional). 2010. Technical Guide 230, *Chemical Exposure Guidelines for Deployed Military Personnel*. http://phc.amedd.army.mil/PHC%20Resource%20Library/TG230.pdf