



DEPARTMENT OF THE ARMY
US ARMY INSTITUTE OF PUBLIC HEALTH
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MCHB-IP-RDE

13 AUG 2011

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, Wilson, Afghanistan, 4 May 2011,
U_AFG_WILSON_IP_A17_20110504

1. The enclosed report details the assessment of one volatile organic compound air sample collected by 710th Brigade Support Battalion personnel, Wilson, Afghanistan, 4 May 2011.
2. None of the chemicals detected in the samples were identified as potential hazards.

FOR THE DIRECTOR:

(b) (6)

Encl

Portfolio Director, Health Risk Management

CF: (w/encl)

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U.S. ARMY PUBLIC HEALTH COMMAND

5158 Blackhawk Road, Aberdeen Proving Ground, Maryland 21010-5403

Deployment Occupational and Environmental Health Surveillance Sample Report,
U_AFG_WILSON_IP_A17_20110504
Health Risk Management Portfolio

Airborne Volatile Organic Compounds, Wilson, Afghanistan

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

CHPPM/PHC FORM 433-E (MCHB-CS-IP), SEP 10

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Preventive Medicine Surveys: 40-5f1

ACKNOWLEDGEMENTS

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**DEPLOYMENT OCCUPATIONAL AND ENVIRONMENTAL
HEALTH SURVEILLANCE SAMPLE REPORT
AIRBORNE VOLATILE ORGANIC COMPOUNDS
WILSON, AFGHANISTAN
4 MAY 2011
U_AFG_WILSON_IP_A17_20110504**

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 sample collected by 710th Brigade Support Battalion on 4 May 2011 at Wilson, 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. It identifies whether or not there is a potential for chronic health concerns which may require additional characterization. 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 (Prov) 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-Environmental Health (DOEHRs-EH). Log into the DOEHRs-EH and search for the samples using the DOEHRs sample identification numbers (IDs) provided in Table 1.

Table 1. Sample Identification Information

DOEHRS-EH Sample ID	Sample ID Reported on Field Data Sheet	Sample Site	Date and Time Sample Collected	Sample Invalid (Yes/No) Reason for Invalid Sample
00004JKH	AFG_WILSON_11122_TO17	Burn Pit - Fence line	2011/05/05 1000	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 submitted with the samples unless otherwise noted.

Table 2. Exposure Information

Questions About Exposure	Information Provided and Assumptions
Why was this sample/sample set collected?	Routine sampling of Ambient Air Pathway as described in the OEHSA dated 6 Feb 2007.
What population is exposed and how?	The majority of base camp personnel are exposed to the ambient air.
What is the timeframe under consideration?	The sample set represents the ambient air for the day of 4 May 2011.
Where was the sample/sample set collected?	The sample was collected from the burn pit fence line.
What is known about location, activity, setting and potential sources of contamination that may affect exposure?	24-hour burning at the burn pit.

6 Prescreen

None of the chemicals detected in the sample were identified as potential hazards because their concentrations were not greater than USAPHC (Prov) Technical Guide 230 military exposure guidelines (MEGs). The prescreening is conducted as described in USAPHC TG 230, section 3.4.3. The sample results were compared to MEGs on 7 June 2011.

7 Limitations

7.1 Field Data Quality

The field data sheet provided with the sample set were adequately filled out.

None of the samples were invalid.

7.2 Sample Receipt at USAPHC Laboratory

The sample set was received at the USAPHC at a temperature of 21 degrees Celsius. The samples were packaged correctly.

7.3 Laboratory Data Quality

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

Some parameters in this data set are flagged with a J code (J). This code indicates an estimated value that was detected above the Method Detection Limit but below the Method Reporting Limit (also known as Limit of Quantitation or Practical Quantitation Limit).

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.

If an OEHSA and/or specific sampling plans have not yet been completed for Wilson, Afghanistan, collect ambient VOC air samples from sites that best represent exposures at least once every 6 days to better characterize conditions over time.

9 Points of Contact

The USAPHC, AIPH POCs for this assessment are Ms. (b) (6) and Ms. (b) (6).
Ms. (b) (6) may be contacted at e-mail (b) (6) and Ms. (b) (6)
may be contacted at e-mail (b) (6), or DSN (b) (6) or commercial
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Approved by:

(b) (6)

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Appendix A

References

1. Department of Defense Directive (DoDD) 6490.02E, Comprehensive Health Surveillance, 21 October 2004.
2. Department of Defense Instruction (DoDI) 6490.03, Deployment Health, 11 August 2006.
3. Department of the Army (DA) Field Manual (FM) 5-19, Composite Risk Management, 21 August 2006.
4. USAPHC (Prov) Technical Guide (TG) 230, Chemical Exposure Guidelines for Deployed Military Personnel, June 2010.