



3-17-2021

To: Jason Hendershot; OSI Holston Safety Manager
Steve Skipper, CIH, CSP; P&S Industrial Hygiene Manager

From: Nathan Penley

RE: Report of Industrial Hygiene Sampling
HSAAP Facility
BAE Systems, Inc.

Please find attached the report of recent exposure monitoring conducted at the BAE Systems HSAAP facility in Kingsport, TN. Sampling results are summarized below.

Multiple samples were collected for the following agents:

- Formaldehyde

Of the 7 samples collected, 6 were above one-half of the applicable occupational exposure limits; areas and personnel with measured levels above these values are listed below.

- Hoist Operator
- Charging Operator
- Fork Truck Operator

Where applicable, recommendations have been provided under separate cover.

We appreciate your assistance in this matter. Please contact me if you have any additional questions or comments.

1.0 INTRODUCTION

Facility / Division: BAE Systems, OSI
Facility Contact: Jason Hendershot
Monitoring Date(s): 03-02-2021, 3-13-2021
Departments Sampled: Nitration, Building 151
Air Contaminants (list): Formaldehyde
Physical Agents NA
Field IH/Affiliation: Nathan Penley
Reviewer/Affiliation: Steve Skipper, CIH, CSP; P&S Industrial Hygiene Manager
Reason for Monitoring: Routine Monitoring
Campaign Number: N/A

2.0 MONITORING OVERVIEW

The survey included collection of industrial hygiene samples as noted above. The facility combines hexamine with acetic acid. This sampling was conducted to evaluate formaldehyde exposure of Nitration employees.

Technical staff attempted to collect samples representative of typical exposures. Airborne concentrations of contaminants exposure levels during the times not monitored were expected to be less than the times that were monitored. Table 1 presents information on the sampling conducted.

Table 1 Sampling Summary			
Sampling equipment used (list)	• Assay 571 passive badges		<input checked="" type="checkbox"/> Maintained per manufacturer's guidance/ BAE procedures (describe if <u>not</u> checked):
Personal samples (check if applicable)	<input type="checkbox"/> NA	<input checked="" type="checkbox"/> Breathing/Hearing Zone (outside PPE)	<input type="checkbox"/> Under Helmet (Welding)
Area samples (check if applicable)	<input checked="" type="checkbox"/> NA	<input type="checkbox"/> Inside Work Area	<input type="checkbox"/> Outside Work Area
Laboratory Used (or NA)	SGS Galson	Lab Report ID:	L530410, L531197
OEL Source(s) (list)	ACGIH		

3.0 RESULTS/DISCUSSION

Table 2 contains information on specific stressors sampled for, and Attachment A includes additional sampling information. Attachment D contains laboratory analytical reports, with analytical methods and media used.

Table 2 Stressor:			
SEG# PS.HOL.069	<input checked="" type="checkbox"/> Check if any $\geq \frac{1}{2}$ OEL / AL)	# Samples: 7	List all Activities / Tasks sampled (Bold if $\geq \frac{1}{2}$ OEL / AL), with primary exposure source(s) <ul style="list-style-type: none">• Operator• Charging Operator• Hoist Operator• Fork Truck Operator
Discussion:			

4.0 RECOMMENDATIONS

Recommendations have been provided separately if applicable.

5.0 EMPLOYEE NOTIFICATION

Attachment C contains Employee Notification Letters for informing employees of the results of sampling. Postings are in Attachment B.

6.0 DOCUMENT RETENTION

Per BAE Systems document retention policy, this report should be retained permanently; OSHA requires retention for 30 years. Please note other sampling information is not attached, but should be considered as included by reference in this report. This information is also retained in BAE Systems corporate files.

7.0 ATTACHMENTS

Attachment A	Air Sampling Results Summary
Attachment B	Air Sampling Results Posting
Attachment C	Employee Air Notification Letters
Attachment D	Laboratory Results

Attachment A
Air Sampling Results Summary

Attachment B
Air Sampling Results Posting

Attachment C
Employee Air Notification Letters

Attachment D
Laboratory Results