



## **Why Have A-EHS Perform Your Industrial Hygiene Sampling?**

We distinguish ourselves in several important areas. This includes value to a client, the technology we use (data-collection Apps), report details, and confidentiality/privacy.

### **Value, Professionalism and Peace of Mind**

- *A-EHS' hourly rates are well below the industry average.*
- *Laboratory analysis fee markup is typically 10%*
- *The professional actually doing the work is an CIH (certified industrial hygienist)*
- *Our contract Laboratory is accredited by the American Industrial Hygiene Association.*
- *A-EHS staff have performed IH sampling in over 10 countries outside the US*
- *We ensure accurate pre- and post-sample calibrations are performed*
- *Sampling devices are checked - where feasible - about every 30 minutes.*
- *We allow our client to review the draft report.*
- *Results are not time-weighted, which is more conservative when assessing exposures*

### **Technology Not Just for Technology's Sake**

- *Apps enhance report details with pictures and increased accuracy*
- *Calculations are done automatically for things like flow rates, total time, or total volume*
- *No transcription errors - the laboratory submission form is automatically completed*
- *Custom exposure values from the client, or chemical manufacturer, can be included*
- *Reduced turnaround time, as Apps format data for inclusion in the final report*
- *We have Apps designed for general IH sampling, noise, and indoor air complaints*

### **Everything You Need is in our Detailed Reports**

- *Reports include a summary for posting in employee common areas like a break room*
- *Personal sampling reports includes a notification letter to employee(s)*
- *Draft reports from direct-reading instruments can be issued within 24 hours; often on-site!*
- *All data is included in the report, such as calibration, notes on PPE, and photographs*
- *Reports are sent as PDFs, we can provide raw data for import into your database*

### **Confidentiality and Employee Privacy is Paramount**

- *Summary reports for posting lacks personal information, such as employee name*
- *PDF reports can be password-protected; we store data in our secure warehouse*
- *Laboratory submission forms do not contain any client information*
- *We never take a picture of an employee's face, unless requested in advance, in writing*
- *Pictures would only be taken related to the workplace exposures being assessed*
- *We will sign a confidentiality agreement, to allow electronic data collection*
- *Your staff can review each picture, and inspect the photo album on the device*

As you may infer from the examples on the following pages, collecting data electronically - especially photographic documentation - is **absolutely the best way to provide a complete, detailed, rapid, and accurate report.**



**Industrial Hygiene Data Summary for Posting example**

**Industrial Hygiene Sampling - Summary Report** job number [redacted] by Mark Rollins, CIH, CSP

*Date, site, dept., job, (no employee names in the summary)*

*Final report includes a summary for posting in work area or break room*

*Reports include detailed photos*

**02/11/2016 Personal Sample** Dept: Maintenance Technician Specifics:

Chemical/Agent sampled and results	ppm	mg/M <sup>3</sup>	other	other units	Regulatory Notes*
1) Lead inorganic (as Pb)		0.0052			for shifts greater than 8 hours, OSHA PEL (in ug/M3) = 400 * hours worked in the day; see 1810.1025
<b>Limits</b>	ppm OSHA PEL/mg/M <sup>3</sup>	ppm TLV mg/M <sup>3</sup>	ppm STEL mg/M <sup>3</sup>	ppm Other mg/M <sup>3</sup>	Comment *If truncated, full text in detailed data sheet
1)	0.05				Well below the OSHA PEL

*Sample results*

*Exposure limits, can include client values*

*Regulatory comments (abbreviated)*

**02/11/2016 Area Sample** Dept: [redacted] Specifics: Sample taken 1 meter

Chemical/Agent sampled and results	ppm	mg/M <sup>3</sup>	other	other units	Regulatory Notes*
1) Lead inorganic (as Pb)		0.0026			for shifts greater than 8 hours, OSHA PEL (in ug/M3) = 400 * hours worked in the day; see 1810.1025
<b>Limits</b>	ppm OSHA PEL/mg/M <sup>3</sup>	ppm TLV mg/M <sup>3</sup>	ppm STEL mg/M <sup>3</sup>	ppm Other mg/M <sup>3</sup>	Comment *If truncated, full text in detailed data sheet
1)	0.05				Well below the OSHA PEL

*Exposure limits*

*Only non-confidential items will be photographed*

**02/11/2016 Area Sample** Dept: [redacted] Specifics: On outside of hood

Chemical/Agent sampled and results	ppm	mg/M <sup>3</sup>	other	other units	Regulatory Notes*
1) Methylene chloride (dichloromethane)	1.8				OSHA STEL 125 ppm, Action Level 12.5 ppm
<b>Limits</b>	ppm OSHA PEL/mg/M <sup>3</sup>	ppm TLV mg/M <sup>3</sup>	ppm STEL mg/M <sup>3</sup>	ppm Other mg/M <sup>3</sup>	Comment *If truncated, full text in detailed data sheet
1)	25.0	50.0	174		Well below the OSHA PEL

*Hygienist comments*

*Up to 4 items can be sampled for at the same time (depending on materials)*

*For privacy reasons, unless requested in writing, photos will never include a person's face*

**02/11/2016 Personal Sample** Dept: [redacted] Specifics:

Chemical/Agent sampled and results	ppm	mg/M <sup>3</sup>	other	other units	Regulatory Notes*
1) Methylene chloride (dichloromethane)	1.2				OSHA STEL 125 ppm, Action Level 12.5 ppm
<b>Limits</b>	ppm OSHA PEL/mg/M <sup>3</sup>	ppm TLV mg/M <sup>3</sup>	ppm STEL mg/M <sup>3</sup>	ppm Other mg/M <sup>3</sup>	Comment *If truncated, full text in detailed data sheet
1)	25.0	50.0	174		Well below the OSHA PEL

*Hygienist's comments will also include any recommendation; these are expanded upon in the final report*

*Stopped sample early as employee went home sick with the flu. Last known sample check was used as "stop time." Well below the OSHA PEL*

*An example of why we check samples periodically*

**Legend:** dBA = decibels, A-weighted; f/cc = fibers per cubic centimeter; LT = Less Than; mg/M3 = milligrams per cubic meter; mppcf = million particles per cubic foot; ng/M3 = nanograms per cubic meter; PEL = OSHA Permissible Exposure Limit; ppm = parts per million; ppb = parts per billion; STEL = Short Term (15 minute) Exposure Limit; TLV = ACGIH Threshold Limit Value; ug/100 cm2 = micrograms per 100 square centimeters; ug/M3 = micrograms per cubic meter

**Confidential Information**  
 Conditions noted at time of survey

Mobile Industrial Hygiene Utility for Environment Sampling from A-EHS and Apps For EHS was used to generate this document

A-EHS 360 Canterbury Road, Brooklyn, CT 06234 Office/Mobile: (202) 569-8027



**Industrial Hygiene Data Letter to Employee example**

Final report includes employee notification letter for any personal samples taken

**Industrial Hygiene Sampling - Letter to Employee**

006-002

Dates of letter & sampling date

Date sample(s) collected:

**Confidential Information Subject to Medical Record Privacy Statutes**

Badge / ID:

On the above date, an industrial hygiene survey took place at

These occupational health samples were collected during your shift in Maintenance.

The materials sampled for, the sample results, regulatory limits, and comments, are listed below.

Full details: employee, company, dept., job, badge #

Medical record confidentiality requirements referenced

Sample results are not "time-weighted" as this is more conservative

Material/Agent sampled, non-Time Weighted	LT?	ppm	mg/M3	other	ct
Inorganic (as Pb)			0.0052		

Photos document work conditions as well as any sampling media IDs

ppm	OSHA PEL mg/M3	ACGIH TLV ppm	mg/M3	OSHA STEL ppm	mg/M3	ppm	Other
	0.05						

**Regulatory Notes**

1) for shifts greater than 8 hours, OSHA PEL (in ug/M3) = 400 + hours worked in the day: see 1910.1025

**Optional Photos Taken During Sampling**

**Industrial Hygienist's Comments**

Well below the OSHA PEL



Letter is all ready for employee and HR/Safety staff to sign

Signature of Certified Industrial Hygienist (CIH)

Employee Signature \_\_\_\_\_

Date \_\_\_\_\_

HR/Safety Signature \_\_\_\_\_

Date \_\_\_\_\_

Certified Industrial Hygienist Mark Rollins, CIH, CSP

Date Feb 26, 2016

**Abbreviations used in this report:** dBA = decibels, A-weighted; f/cc = fibers per cubic centimeter; LT = Less Than; mg/M3 = milligrams per cubic meter; mppcf = million particles per cubic foot; ng/M3 = nanograms per cubic meter; PEL = OSHA Permissible Exposure Limit; ppm = parts per million; ppb = parts per billion; STEL = Short Term (15 minute) Exposure Limit; TLV = ACGIH Threshold Limit Value; ug/100 cm2 = micrograms per 100 square centimeters; ug/M3 = micrograms per cubic meter

Confidential Information

Mobile Industrial Hygiene Utility for Environment Sampling from A-EHS and Apps For EHS was used to generate this document

A-EHS 360 Canterbury Road, Brooklyn, CT 06234 Office/Mobile: (202) 569-8027

Glossary of terms and abbreviations



### Industrial Hygiene Data from Direct Reading Instruments example

Signature of Certified Industrial Hygienist (CIH)

Initial summary report for data collected by direct-reading instruments (e.g. detector tube)

Chemical sampled and device used

Mark Rollins, CIH

Specific site contact for any questions on the report

Date: 08/28/2018

**Summary Report for Posting**  
Industrial Hygiene Sampling by Direct Reading Instrument

For Questions on this report, please contact company employee(s) *John Marston, West Conn*

Chemical / Agent Sampled	Regulatory Limits in ppm		Notes on Regulatory
	US OSHA PEL	NIOSH REL	
Ammonia			
Equipment Used to Sample / Measure	OSHA Action Level	Local Gov't Limit	
	OSHA Ceiling	25,000	
Calibration Comments	ACGIH TLV	Mfg's Rec'd Limit	
		Other Limit	
		Other Limit Source	
		UK HSE	

Sampling can also be done outside the USA

All details including department and job, as well as comments on the results

For privacy reasons, unless requested in writing, photos will never include a person's face



**Sample Details**  
Location: [Redacted]  
Job: sample while emptying wastewater  
Notes: Sampled near breathing zone. Results were "none detected", well below UK HSE WEL (Workplace Exposure Limit).

**Sample Details**  
Location: [Redacted]  
Dept: [Redacted]  
Job: waste container on benchtop  
Notes: Readings taken when waste container opened. Results were well below UK HSE limit.

**Sample Data**  
Area Sample  
Results: 5.0000  
Units: ppm

**Sample Details**  
Location: [Redacted]  
Dept: [Redacted]  
Job: Pouring solution out  
Notes: Results were well below UK HSE WEL (Workplace Exposure Limit).

**Sample Data**  
Personal Sample  
Results: 2.0000  
Units: ppm

Any samples within the "breathing zone" (1 ft / 30.5 cm radius of nose/mouth) are considered "personal monitoring" and these people would receive a separate letter also

Photographs document the work sampled, as well as the actual reading on the device (in this example a colorimetric detector tube)

Glossary of terms and abbreviations

**Abbreviations used in this report:** dBA = decibels, A-weighted; f/cc = fibers per cubic centimeter; LT = Less Than; mg/M3 = milligrams per cubic meter; mppcf = million particles per cubic foot; ng/M3 = nanograms per cubic meter; PEL = OSHA Permissible Exposure Limit; ppm = parts per million; ppb = parts per billion; STEL = Short Term (15 minute) Exposure Limit; TLV = ACGIH Threshold Limit Value; ug/100 cm2 = micrograms per 100 square centimeters; ug/M3 = micrograms per cubic meter

Confidential Information  
Conditions noted at time of survey

TIMING - The IH Mobile In-situ data Gatherer from A-EHS and Apps For EHS was used to generate this document

A-EHS 360 Canterbury Road, Brooklyn, CT 06234 Office/Mobile: (202) 569-8027



**Industrial Hygiene Data - Laboratory Submission Form example**

Page 1 of 1

**TRAVELERS** LABORATORY WORKORDER:

RUSH REQUESTS – AUTHORIZED BY (LAB CONTACT) \_\_\_\_\_  
 3 Business Days (50% surcharge will be applied.)  
 2 Business Days (100% surcharge will be applied.)  
 1 Business Day (200% surcharge will be applied.)  
**ALL RUSH REQUESTS MUST BE AUTHORIZED PRIOR TO SAMPLE SUBMISSION**

**SEND INVOICE TO:** Name: Mark Rollins, CIH, CSP  
 Company: Isosceles Group  
 Address: 50 Congress Street  
 City, State, Zip: Boston MA 02109  
 Phone/Fax #: O: (617) 330-2800 F: (617) 330-2801 C: (202) 569-8027  
 E-Mail Address: MRollins@theISOgroup.com

**SEND REPORT TO:** Name: Mark Rollins, CIH, CSP  
 Company: Isosceles Group  
 Address: 50 Congress Street  
 City, State, Zip: Boston MA 02109  
 Phone #/Fax #: O: (617) 330-2800 F: (617) 330-2801 C: (202) 569-8027  
 E-Mail Address: MRollins@theISOgroup.com

Check if change of address

**Travelers Industrial Hygiene Laboratory**  
 90 Lamberton Road  
 Windsor, CT 06095  
 Phone: 860-687-7400 Fax: 860-687-7430  
**Help Line: 1-800-842-0355**  
 travelerslab.com

Survey Date(s) <small>(critical for analyses like hexavalent chromium)</small>	Survey Location:	Description Where Sample Was Collected <small>(where or on whom the sample was collected)</small>	Total Minutes Sampled	MasterCard or Visa Number
NA9	Cleaning of printed circuit boards		60	
NF3	BLANK			

PO Number: \_\_\_\_\_  
 MasterCard or Visa Number: \_\_\_\_\_  
 Total Minutes Sampled: 60

**\*\* Pump Flow Rate and Air Volume calculations (see reverse side):**  
 1. Average the pre and the post sampling calibration flow rates (cc/min).  
 2. Divide the average flow rate by 1000 to convert to liters per minute (LPM).  
 3. Multiply the AVERAGE PUMP FLOW RATE (LPM) by the TOTAL MINUTES sampled to get the total AIR VOLUME in liters.

3M OVM – 3M organic vapor monitor  
 Assay NH3 – Assay ammonia badge  
 Assay HCHO – Assay aldehyde

Signature: \_\_\_\_\_  
 Date: \_\_\_\_\_

Sampling App by **A-EHS**  
 AppsForEHS.com

Our markup is typically 10%, well below industry average

All the calculations on time and/or volume are performed automatically by the App; no tedious error-prone calculation means the most accurate, most rapid report

Besides the signature, samples are tracked via shipper (ex. Fed Ex) so chain-of-custody is intact

Your rush is our rush, and therefore the lab's rush: just let us know but be aware rush samples do cost more

Sample "blanks" are always included, as this is proper protocol to ensure accurate analytical results

Samples are always identified by a number; and "survey location" is a job number only: client and employee confidentiality are retained

We always use a laboratory accredited by the AIHA (American Industrial Hygiene Association) for analysis of exposure monitoring samples.



### Final Industrial Hygiene Data Provided to Client example

A one-page summary of each sampling event provides all the details from date to location to calibration to hygienist's comments - this can be provided in electronic format to client's specifications

#### Industrial Hygiene or Environmental Sampling - Full Data Set

##### Location & Sample Details

Sample type, employee details, shift, shift length; full details

Start	Sample Date & Type	Project ID	Lab Name & Location		
	Personal Sample	006-002	Travelers		
Line or Area Identifier	First Name	Shift	Lab Number Log Ref No		
	Joe	1	Sample ID 2243AC		
ID No.	Department	Job Title/Description	Description of Area Sample		
	Maintenance	Technician			

Laboratory, lab job number, and sample ID are included, as applicable

##### Equipment & Media

Sampling equipment, media, work conditions including engineering controls and PPE

Media ID / Field Sample No.	Engineering Controls	Optional Photographs
Equipment	Blasting is performed inside ducted cabinet	
Equipment Serial #	Protective Equipment	
Media	Safety glasses	
Flow Rate	MCE 0.8um	

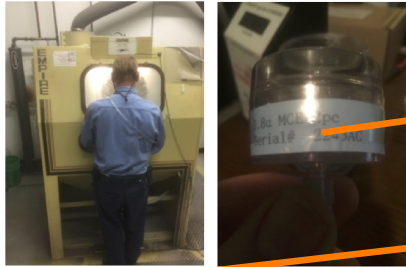


Photo of Sample ID

Full sample data including calibration

##### Calibration and Time / Flow Data

Flow 1	Flow 2	Noise or Other	Flow Cal Units	Start Time 1	Stop Time 1	Start Time 2	Stop Time 2	Break Time	Total Minutes	Volume
2.8	2.85	See Comments	L/min	6:42 AM	10:07 AM			0	204	577.7

##### Comments

Airborne limits; reference US OSHA and ACGIH

Units	Blank Corrected?	Yes	Altitude Corrected?	No	ppm	mg/M <sup>3</sup>	other
Inorganic (as Pb)						0.0052	

Blank-corrected sample results; altitude corrected if needed

##### Airborne Concentration Limits (if applicable)

These limits are for things like noise exposure

OSHA PELs ppm	OSHA PELs mg/M <sup>3</sup>	ACGIH TLVs ppm	ACGIH TLVs mg/M <sup>3</sup>	Country Limit ppm	Country Limit mg/M <sup>3</sup>	Manufacturer Limit ppm	Manufacturer Limit mg/M <sup>3</sup>	Client Limit ppm	Client Limit mg/M <sup>3</sup>
1	0.0500								

Can include limits from a chemical manufacturer, or a client's in-house exposure limit

##### Non-Air Limit(s)

OSHA Action	OSHA PEL	OSHA Max	ACGIH TLV	NIOSH REL	Country Limit	Client Limit
-------------	----------	----------	-----------	-----------	---------------	--------------

##### Regulatory Notes & Comments, Certification

1	for shifts greater than 8 hours, OSHA PEL (in ug/M3) = 400 ÷ hours worked in the day; see 1910.1025
2	
3	
4	

Limits for work done outside the US

Regulatory notes

Comments	Hygienist's / Technician's Comments
	Well below the OSHA PEL

Mark Rollins, CIH, CSP

Abbreviations used in this report: dBA = decibels, A-weighted; f/cc = fibers per cubic centimeter; LT = Less Than; mg/M3 = milligrams per cubic meter; mppcf = million particles per cubic foot; n/m3 = nanograms per cubic meter; PEL = OSHA Permissible Exposure Limit; ppm = parts per million; ppb = parts per billion; STEL = Short-Term Exposure Limit; TLV = ACGIH Threshold Limit Value; ug/100 cm2 = micrograms per 100 square centimeters; ug/M3 = micrograms per cubic meter

Notes from lab report, as well as hygienist's comments

Mobile Industrial Hygiene Utility for Environment Sampling from A-EHS and Apps For EHS was used to generate this document

A-EHS 360 Canterbury Road, Brooklyn, CT 06234 Office/Mobile: (202) 569-8027

Glossary of terms and abbreviations

Signature of Certified Industrial Hygienist (CIH)