

From: Braun, Gary <Gary.Braun@aecom.com>
Sent: Wednesday, February 14, 2024 8:45 AM
To: Keller, Ethan J - DNR; info@kinsmanandcompany.com;
natelenz@gmail.com
Cc: Chad Erdmann (Chad.Erdmann@libertysteel.us);
'Howard.Law@gfgalliance.com'; Henderson, David; Lutzen, Chris
Subject: Former FV Steel & Wire Company Site at 111 N. Douglas St. Hortonville,
WI (WDNR BRRTS#: 02-45-560221)
Attachments: 2024-02_Former FVSW Jan'24 Indoor Air Results .pdf

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Good morning –

Attached are the January 2024 indoor air monitoring results for the above referenced site. WMS samplers were deployed at the breathing level of about 5 feet above the floor to mimic worker breathing and air movement zones. Specifically, three indoor air samples were collected in Building E (IA-1), Building D-West (IA-2), and Building D-East (IA-3), as illustrated on the attached site location map. There were no detections of any of the target analyte constituents.

No immediate actions appear to be required to address indoor air quality.

The indoor air passive sampling will continue as outlined in the October 16, 2023, Work Plan Addendum, which includes indoor air sample collection events between March 1st – April 15th, 2024 and in June 2024.

Please do not hesitate to contact me with any questions.

Regards,
Gary

Gary Braun, P.G.
Project Manager/Senior Hydrogeologist
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**VAPOR INTRUSION (SUB-SLAB & INDOOR AIR)
MONITORING LOCATIONS**

Former FV Steel & Wire Company Site
111 N. Douglas Street, Hortonville, WI

Legend

- ◆ Indoor Air Sample
- ▲ Soil Vapor Test Locations
- Railroad
- ▭ Project Area

Note:
Sub-slab vapor monitoring was not conducted in Jan. 2024

Drawn: AAA	1/5/2024
Approved: CL	1/5/2024
Scale:	AS SHOWN
PROJECT NUMBER	60428891
FIGURE NUMBER	1

Indoor Air Monitoring Results
January 2024

2/13/2024

Mr. Gary Braun

AECOM

1555 North RiverCenter Drive

Suite 214

Milwaukee WI 53212

Project Name: FV STEEL AND WIRE

Project #: 60428891

Workorder #: 2401619

Dear Mr. Gary Braun

The following report includes the data for the above referenced project for sample(s) received on 1/31/2024 at Eurofins Air Toxics LLC.

The data and associated QC analyzed by Passive S.E. WMS are compliant with the project requirements or laboratory criteria with the exception of the deviations noted in the attached case narrative.

Thank you for choosing Eurofins Air Toxics LLC. for your air analysis needs. Eurofins Air Toxics Inc. is committed to providing accurate data of the highest quality. Please feel free to contact the Project Manager: Jade White at 916-985-1000 if you have any questions regarding the data in this report.

Regards,



Jade White

Project Manager

WORK ORDER #: 2401619

Work Order Summary

CLIENT:	Mr. Gary Braun AECOM 1555 North RiverCenter Drive Suite 214 Milwaukee, WI 53212	BILL TO:	Accounts Payable Austin AECOM PO Box 203970 Austin, TX 78720
PHONE:	(414)-831-4100	P.O. #	FV STEEL AND WIRE
FAX:	(414)-831-4101	PROJECT #	60428891 FV STEEL AND WIRE
DATE RECEIVED:	01/31/2024	CONTACT:	Jade White
DATE COMPLETED:	02/13/2024		

<u>FRACTION #</u>	<u>NAME</u>	<u>TEST</u>
01A	IA-1	Passive S.E. WMS
02A	IA-2	Passive S.E. WMS
03A	IA-3	Passive S.E. WMS
04A	Trip Blank	Passive S.E. WMS
05A	Lab Blank	Passive S.E. WMS
06A	CCV	Passive S.E. WMS
07A	LCS	Passive S.E. WMS
07AA	LCSD	Passive S.E. WMS

CERTIFIED BY: 

 Technical Director

DATE: 02/13/24

Certification numbers: AZ Licensure AZ0775, FL NELAP – E87680, LA NELAP – 02089, NH NELAP – 209222, NJ NELAP - CA016, NY NELAP - 11291, TX NELAP – T104704434-22-18, UT NELAP – CA009332022-14, VA NELAP - 12240, WA ELAP - C935

Name of Accreditation Body: NELAP/ORELAP (Oregon Environmental Laboratory Accreditation Program) CA300005-017

Eurofins Environment Testing Northern California, LLC certifies that the test results contained in this report meet all requirements of the 2016 TNI Standard.

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180 BLUE RAVINE ROAD, SUITE B FOLSOM, CA - 95630
 (916) 985-1000

LABORATORY NARRATIVE
WMS Passive SE by Mod EPA TO-17
AECOM
Workorder# 2401619

Four WMS-SE samples were received on January 31, 2024. The laboratory analyzed the charcoal sorbent bed of the passive sampler following modified method EPA TO-17. The VOCs were chemically extracted using carbon disulfide and an aliquot of the extract was injected into a GC/MS for identification and quantification of volatile organic compounds (VOCs).

The mass of each target compound adsorbed by the sampler was converted to units of concentration using the sample deployment time and the sampling rate for each VOC. If sampling rates were calculated by the lab or the manufacturer, the concentration result has been flagged as an estimated value. Results are not corrected for desorption efficiency.

Please note that 1,1,2,2-Tetrachloroethane (1,1,2,2-PCA) can degrade into Trichloroethene (TCE) during storage on the charcoal-based sorbent used in the WMS device. Samples containing 1,1,2,2-PCA may yield reduced concentrations of 1,1,2,2-PCA and elevated concentrations of TCE.

The reference method used for this procedure is EPA TO-17, which describes the collection of VOCs in ambient air using sorbents and analysis by GC/MS. Because TO-17 describes active sample collection using a pump and thermal desorption as the preparation step, several modifications are required. Modifications to TO-17 are listed in the table below:

<i>Requirement</i>	<i>TO-17</i>	<i>ATL Modifications</i>
Sample Collection	Pump pulls measured air volume through sorbent tube	VOCs in air adsorbed onto sorbent bed passively through diffusion
Sample Preparation	Thermal extraction	Solvent extraction
Sorbent tube conditioning	Condition newly packed tubes prior to use	Charcoal-based sorbent is a single use media and conditioning is conducted by vendor.
Instrumentation	Thermal desorption introduction system	Liquid injection introduction system
Internal Standard	Gas-phase internal standard introduced on the tube or focusing trap during analysis	Liquid-phase internal standard introduced on the tube at the time of extraction
Media and sample storage	<4 deg C, 30 days	Media shelf life is determined by vendor; sample hold-time is 6 months for the RAD130 and WMS. Sample preservation requirements are storage in a cool, solvent-free refrigerator and optional use of ice during shipping.
Internal Standard Recovery	+/-40% of daily CCV area	-50% to +100% of daily CCV area

Receiving Notes

There were no receiving discrepancies.

Analytical Notes

To calculate ug/m³ concentrations in the Lab Blank, a sampling duration of 10240 minutes was applied.

Definition of Data Qualifying Flags

Ten qualifiers may have been used on the data analysis sheets and indicate as follows:

B - Compound present in laboratory blank greater than reporting limit (background subtraction not performed).

J - Estimated value.

E - Exceeds instrument calibration range.

S - Saturated peak.

Q - Exceeds quality control limits.

U - Compound analyzed for but not detected above the reporting limit.

UJ- Non-detected compound associated with low bias in the CCV

N - The identification is based on presumptive evidence.

C - Estimated concentration due to calculated sampling rate

CN - See case narrative explanation.

File extensions may have been used on the data analysis sheets and indicates as follows:

a-File was requantified

b-File was quantified by a second column and detector

r1-File was requantified for the purpose of reissue

**Summary of Detected Compounds
VOC BY PASSIVE SAMPLER - GC/MS**

Client Sample ID: IA-1

Lab ID#: 2401619-01A

No Detections Were Found.

Client Sample ID: IA-2

Lab ID#: 2401619-02A

No Detections Were Found.

Client Sample ID: IA-3

Lab ID#: 2401619-03A

No Detections Were Found.

Client Sample ID: Trip Blank

Lab ID#: 2401619-04A

No Detections Were Found.



Air Toxics

Client Sample ID: IA-1

Lab ID#: 2401619-01A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020810sim	Date of Collection:	1/29/24 11:00:00 AM
Dil. Factor:	1.00	Date of Analysis:	2/8/24 11:09 AM
		Date of Extraction:	2/8/24

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Vinyl Chloride	0.20	16	Not Detected	Not Detected
1,1-Dichloroethene	0.20	14	Not Detected	Not Detected
1,1-Dichloroethane	0.050	3.1	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.050	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.050	2.2	Not Detected	Not Detected
Trichloroethene	0.050	1.9	Not Detected	Not Detected
Tetrachloroethene	0.050	1.2	Not Detected	Not Detected

Temperature = 77.0F , duration time = 10200 minutes.

Container Type: WMS-SE

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130



Air Toxics

Client Sample ID: IA-2

Lab ID#: 2401619-02A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020811sim	Date of Collection:	1/29/24 11:10:00 AM
Dil. Factor:	1.00	Date of Analysis:	2/8/24 11:36 AM
		Date of Extraction:	2/8/24

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Vinyl Chloride	0.20	16	Not Detected	Not Detected
1,1-Dichloroethene	0.20	14	Not Detected	Not Detected
1,1-Dichloroethane	0.050	3.1	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.050	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.050	2.2	Not Detected	Not Detected
Trichloroethene	0.050	1.9	Not Detected	Not Detected
Tetrachloroethene	0.050	1.2	Not Detected	Not Detected

Temperature = 77.0F , duration time = 10195 minutes.

Container Type: WMS-SE

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130



Air Toxics

Client Sample ID: IA-3

Lab ID#: 2401619-03A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020812sim	Date of Collection:	1/29/24 11:30:00 AM
Dil. Factor:	1.00	Date of Analysis:	2/8/24 12:03 PM
		Date of Extraction:	2/8/24

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Vinyl Chloride	0.20	16	Not Detected	Not Detected
1,1-Dichloroethene	0.20	14	Not Detected	Not Detected
1,1-Dichloroethane	0.050	3.1	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.050	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.050	2.2	Not Detected	Not Detected
Trichloroethene	0.050	1.9	Not Detected	Not Detected
Tetrachloroethene	0.050	1.3	Not Detected	Not Detected

Temperature = 77.0F , duration time = 10175 minutes.

Container Type: WMS-SE

Surrogates	%Recovery	Method Limits
Toluene-d8	101	70-130



Air Toxics

Client Sample ID: Trip Blank

Lab ID#: 2401619-04A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020813sim	Date of Collection:	1/29/24 11:35:00 AM
Dil. Factor:	1.00	Date of Analysis:	2/8/24 12:30 PM
		Date of Extraction:	2/8/24

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Vinyl Chloride	0.20	16	Not Detected	Not Detected
1,1-Dichloroethene	0.20	14	Not Detected	Not Detected
1,1-Dichloroethane	0.050	3.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.050	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.050	2.2	Not Detected	Not Detected
Trichloroethene	0.050	1.9	Not Detected	Not Detected
Tetrachloroethene	0.050	1.2	Not Detected	Not Detected

Temperature = 77.0F , duration time = 10240 minutes.

Container Type: WMS-SE

Surrogates	%Recovery	Method Limits
Toluene-d8	100	70-130



Air Toxics

Client Sample ID: Lab Blank

Lab ID#: 2401619-05A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020805sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	2/8/24 08:50 AM
		Date of Extraction:	2/8/24

Compound	Rpt. Limit (ug)	Rpt. Limit (ug/m3)	Amount (ug)	Amount (ug/m3)
Vinyl Chloride	0.20	16	Not Detected	Not Detected
1,1-Dichloroethene	0.20	14	Not Detected	Not Detected
1,1-Dichloroethane	0.050	3.0	Not Detected	Not Detected
cis-1,2-Dichloroethene	0.050	2.6	Not Detected	Not Detected
1,2-Dichloroethane	0.050	2.2	Not Detected	Not Detected
Trichloroethene	0.050	1.9	Not Detected	Not Detected
Tetrachloroethene	0.050	1.2	Not Detected	Not Detected

Temperature = 77.0F , duration time = 10240 minutes.

Container Type: WMS-SE

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

Client Sample ID: CCV

Lab ID#: 2401619-06A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020802sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	2/8/24 07:28 AM
		Date of Extraction:	NA

Compound	%Recovery
Vinyl Chloride	77
1,1-Dichloroethene	107
1,1-Dichloroethane	85
cis-1,2-Dichloroethene	96
1,2-Dichloroethane	84
Trichloroethene	110
Tetrachloroethene	116

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

Client Sample ID: LCS

Lab ID#: 2401619-07A

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020803sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	2/8/24 07:55 AM
		Date of Extraction:	2/8/24

Compound	%Recovery	Method Limits
Vinyl Chloride	112	50-140
1,1-Dichloroethene	117	70-130
1,1-Dichloroethane	93	70-130
cis-1,2-Dichloroethene	102	70-130
1,2-Dichloroethane	84	70-130
Trichloroethene	114	70-130
Tetrachloroethene	116	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	105	70-130

Client Sample ID: LCSD

Lab ID#: 2401619-07AA

VOC BY PASSIVE SAMPLER - GC/MS

File Name:	c020804sim	Date of Collection:	NA
Dil. Factor:	1.00	Date of Analysis:	2/8/24 08:22 AM
		Date of Extraction:	2/8/24

Compound	%Recovery	Method Limits
Vinyl Chloride	115	50-140
1,1-Dichloroethene	117	70-130
1,1-Dichloroethane	91	70-130
cis-1,2-Dichloroethene	98	70-130
1,2-Dichloroethane	81	70-130
Trichloroethene	110	70-130
Tetrachloroethene	112	70-130

Container Type: NA - Not Applicable

Surrogates	%Recovery	Method Limits
Toluene-d8	102	70-130

SORBENT SAMPLE COLLECTION



Sample Transportation Notice

Relinquishing signature on this document indicates that sample is being shipped in compliance with all applicable local, State, Federal, national, and international laws, regulations and ordinances of any kind. Eurofins assumes no liability with respect to the collection, handling or shipping of these samples. Relinquishing signature also indicates agreement to hold harmless, defend, and indemnify Eurofins against any claim, demand, or action, of any kind, related to the collection, handling, or shipping of samples. D.O.T. Hotline (800) 467-4922.

2401619

180 BLUE RAVINE ROAD, SUITE B
FOLSOM, CA 95630
(916) 985-1000 FAX (916) 985-1020

Page ___ of ___

CHAIN-OF-CUSTODY RECORD

Project Manager Gary Braun
 Collected by: (Print and Sign) Chris Lutzen
 Company AECOM Email Chris.Lutzen@aecom.com
 Address _____ City Oshkosh State WI Zip 54901
 Phone 262-278-9823 Fax _____

Project Info: P.O. # <u>FV STEEL AND WIRE</u> Project # <u>60428891</u> Project Name <u>FV STEEL AND WIRE</u>	Turn Around Time: <input type="checkbox"/> Normal <input type="checkbox"/> Rush	Circle Reporting Units: ppbv ppmv ug/m ³ mg/m ³
	specify _____	

Lab I.D.	Field Sample I.D. (Location)	Tube # / Cartridge #	Date of Collection	Start Time	End Time	Duration	Final Volume	Analysis Requested
01A	IA-1		11/29/24	11/22/24 900	11/29/24 1100	7 Day		Indoor Air To-17
02A	IA-2		11/29/24	11/22/24 915	11/29/24 1110	7 Day		Indoor Air To-17
03A	IA-3		11/29/24	11/22/24 955	11/29/24 1130	7 Day		Indoor Air To-17
04A	Trip Blank		11/29/24	11/22/24 855	11/29/24 1135	7 Day		To-17

Relinquished by: (signature) <u>[Signature]</u> Date/Time <u>11/29/24</u>	Received by: (signature) <u>[Signature]</u> Date/Time <u>11/31/24 1004</u>	Pump Calibration Information Pre-test Flow Rate: Post-test Flow Rate: Average Flow Rate: Notes:
Relinquished by: (signature) _____ Date/Time _____	Received by: (signature) _____ Date/Time _____	
Relinquished by: (signature) _____ Date/Time _____	Received by: (signature) _____ Date/Time _____	

Lab Use Only	Shipper Name	Air Bill #	Temp (°C)	Condition	Custody Seals Intact?	Work Order #
	FED EX		N/A	Good	Yes No None	