Washington University in St. Louis
ENVIRONMENTAL HEALTH & SAFETY

June 17, 2019

Annah Murray
Regional PCB Coordinator
Waste Remediation and Permitting Branch
Air and Waste Management Division
U.S. Environmental Protection Agency Region VII
11201 Renner Blvd
Lenexa, Kansas 66219

Re: Urbauer Elevator Pit

Dear Ms. Murray,

In February 2019, Washington University in St. Louis (WU) provided a letter to you describing sampling results and actions taken by WU regarding the Urbauer Hall elevator pit you viewed during your October 29, 2018 campus visit. This current letter provides an update on our efforts.

The sampling results described in our February letter indicated that PCB levels in the elevator sump-pit water and air were below actionable levels. However, in Spring 2019, after significant rainfall events, WU observed a new oil/water mixture seeping into the elevator pit area. This new mixture does not appear to originate from the elevator system from which our original samples were taken. It may be ground water that seeped into the pit due to heavy precipitation events.

WU is collecting this new oil/water mixture for proper disposal. Sampling results of the mixture indicate 548,000 micrograms/kg PCB (see Attachment A). This sampling result prompted WU to conduct additional air sampling results of the elevator pit, cab, and hallways outside each elevator entrance on all floors of Urbauer Hall. Consistent with our February letter, the air sampling in the cab and hallways remains well below regulatory actionable levels (see Attachment B). However, the air sampling results for the pit were 680 ng/M^3 (see Attachment C), which exceeds the USEPA Exposure Levels for Evaluation of PCB's in Indoor School Air, based on adults being in school for eight (8) hours per day for 185 days per year. It is inconceivable that WU personnel would spend anywhere near that time in the elevator pit (e.g., to perform necessary maintenance or repairs). Nevertheless, in an abundance of caution, WU has prohibited entry into the pit through the use of signage at the equipment room entrance as well as in the pit and through notification of Facilities and contractor personnel.

WU has engaged environmental consultant Intertek/Professional Services Industries (PSI) to develop engineering remedies to prevent future seepage into the pit area, and to ensure continued safety of workers performing elevator maintenance. WU will determine the remedy, and work with the consultant to develop a PCB Work Plan, which we will provide to EPA when it is available.

Please feel free to contact me for further clarifications if needed.

Sincerely,

Linda Vishino

Linda Vishino
Director, Office of Environmental Compliance

RECEIVED
JUN 25 2019

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(314) 362-6816, Fax (314) 362-1995, http://ehs.wustl.edu/

Attachment A

			Mar 12, 2019
Job Number:	JC83822		
Account:	Environmental Science Consulting, LLC.		
Project:	Washington University PCB		
Project Number:	Urbauer Freight Elevator Oil Samples		
		Legend:	Hit
Client Sample ID:		U.F. OIL 1 Sump Oil	U.F. OIL 2 Floor Oil/Water
Lab Sample ID:		JC83822-1	JC83822-2
Date Sampled:		03/01/2019	03/01/2019
Matrix:		Oil	Oil
GC/LC Semi-volatiles (SW846 8082A)			
Aroclor 1016	ug/kg	ND (200)	ND (200)
Aroclor 1221	ug/kg	ND (200)	ND (200)
Aroclor 1232	ug/kg	ND (130)	ND (130)
Aroclor 1242	ug/kg	548,000	102,000
Aroclor 1248	ug/kg	ND (290)	ND (290)
Aroclor 1254	ug/kg	ND (120)	ND (120)
Aroclor 1260	ug/kg	ND (160)	ND (160)
Aroclor 1268	ug/kg	ND (74)	ND (74)
Aroclor 1262	ug/kg	ND (38)	ND (38)

Attachment B

Table 5. Urbauer Elevator Air Sample Result Summary. Collected March 28-29, 2019.

Sample Designation	Sample Description	PCB Results in µg/m³	PCB Results in ng/m³	Aroclor (if detected)	Potential Action Levels * **(ug)**	Potential Action Level * **(ng)**
U. E. 1	Elevator cab	**0.085**	**85**	Aroclor-1016	0.500 ug/m3	500 ng/m3
U. E. 2D	Elevator cab duplicate	**0.076**	**76**	Aroclor-1016	0.500 ug/m3	500 ng/m3
U. E. 3B	Elevator cab blank	ND	ND	ND	0.500 ug/m3	500 ng/m3
U. E. 4	First floor hallway by elevator	ND	ND	ND	0.500 ug/m3	500 ng/m3
U. E. 5	Basement hallway by elevator	**0.15**	**150**	Aroclor-1016	0.500 ug/m3	500 ng/m3
U. E. 6	Second floor hallway by elevator	ND	ND	ND	0.500 ug/m3	500 ng/m3
U. E. 7	Third floor hallway by elevator	ND	ND	ND	0.500 ug/m3	500 ng/m3

* USEPA Exposure Levels for Evaluation of PCB's in Indoor School Air is 0.500 ug/m3, or 500 ng/m3 (adults).

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com EnvChemistry2@emsl.com

EMSL Order:	011904671
CustomerID:	PSI54
CustomerPO:	
ProjectID:	

Attn: **Greg Chambliss**
PSI - Professional Service Industries
8669 Olive Boulevard
Saint Louis, MO 63132

Phone: (314) 432-8073
Fax: (314) 432-5119
Received: 04/23/19 9:30 AM

Project: **Project 0029-4113 Urbauer hall- Elevator Pit sampling**

Analytical Results

Client Sample Description WU-Urbauer-01 Elevator Pit ***Collected:*** 4/20/2019 ***Lab ID:*** *011904671-0001*

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
GC-SVOA								
TO-10A	Aroclor-1016	0.68	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1221	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1232	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1242	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1248	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1254	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1260	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1262	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1268	ND	0.033	µg/m³	4/24/2019	AF	4/25/2019	EH

Client Sample Description WU-Urbauer-02 QA/QC Blank ***Collected:*** 4/20/2019 ***Lab ID:*** *011904671-0002*

Method	Parameter	Result	RL	Units	Prep Date	Analyst	Analysis Date	Analyst
GC-SVOA								
TO-10A	Aroclor-1016	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1221	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1232	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1242	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1248	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1254	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1260	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1262	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH
TO-10A	Aroclor-1268	ND	0.050	µg/tube	4/24/2019	AF	4/25/2019	EH

Definitions:
ND - indicates that the analyte was not detected at the reporting limit
RL - Reporting Limit (Analytical)
D - Dilution