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Memorandum

To: Michele S.W. Paul and Cheryl Henlin, City of New Bedford
From: David M. Sullivan, LSP, TRC Environmental Corporation
Subject: Summary of Air Sampling for Polychlorinated Biphenyls
New Bedford High School – Room A-203-2
Date: August 16, 2012
CC: Diane Silverman, Ph.D., TRC Environmental Corporation

This memorandum summarizes information regarding the recent air sampling for polychlorinated biphenyls (PCBs) within Room A-203-2 at the New Bedford High School (NBHS). Supplemental indoor air sampling was conducted twice in 2012: April vacation week and during the summer break in July.

As with prior PCB air sampling activities at the NBHS, each sample collected was a composite of a 24 hour period. Samples were started in the morning of the first day and then stopped the following morning. All samplers were set at a sampling rate of 5 liters per minute. The start and end sample rate was recorded and an average of the two values with the duration of the sampling event was used to calculate the sample volume. All samples, including duplicates collected in both April and July, were submitted to Pace Analytical Services, Incorporated of Schenectady, New York for PCB Homolog analysis by United States Environmental Protection Agency (EPA) Method 680.

The first sampling event was started April 18th and concluded on April 19th to evaluate conditions in Room A-203-2 following adjustments to the air handling system to increase the air exchange rate efficiency.

Following receipt and validation of the April 2012 sampling event results, the univent air filters were changed, ceiling tiles were removed and replaced, and all moveable furniture within Room A-203-2 was removed prior to the July 2012 sampling event. Additional indoor air sampling was started on July 18th and completed on July 19th to further evaluate the potential PCB source(s).

The results from both rounds of sampling in 2012, as well as all three rounds of 2011 air sampling, are presented in the attached Table 1. Laboratory analytical results indicate total PCB concentrations consistent with previous sampling events in 2011.

We look forward to discussing these results at your convenience.

Table 1
Summary of PCB Homolog Results for Room A-203-2 Indoor Air Samples
New Bedford High School
New Bedford, Massachusetts

Analysis	Analyte	Sample Location:									Room A-203-2								
		Sample ID:									TRC-10A-680-24	TRC-10A-680-24R	TRC-10A-A-203-2	TRC-10A-A-203-2D	HS-A-203-2	HS-A-203-DUP	TRC-10A-A-203-2	TRC-10A-A-203-2D	
		Sample Date:									2/23/2011	4/21/2011	8/23/2011	8/23/2011	4/18/2012	4/18/2012	7/19/2012	7/19/2012	
		EPA Public Health Levels												Field Dup		Field Dup		Field Dup	
		Age 1-<2 yr	Age 2-<3 yr	Age 3-<6 yr	Age 6-<12 yr Elementary School	Age 12-<15 yr Middle School	Age 15-<19 yr High School	Age 19+ yr Adult	EPA Project Threshold for Further Investigation	Acceptable Long-Term Average Exposure Concentration									
PCB Homologs																			
(ug/m3)	Monochlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.000672 U	0.000667 U	0.000680 U	0.000677 U	0.000662 U	0.000659 U	0.000687 U	0.000674 U	
	Dichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0447 J	0.0379	0.0704	0.0595	0.0346	0.0387	0.0605	0.0555	
	Trichlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.243 J	0.202	0.282	0.243	0.167	0.188	0.288	0.280	
	Tetrachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.154 J	0.104	0.208	0.151	0.138	0.153	0.206	0.185	
	Pentachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00134 U	0.00133 U	0.00359	0.00320	0.00266	0.00301	0.00411	0.00555	
	Hexachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00134 U	0.00133 U	0.00136 U	0.00136 U	0.00133 U	0.00132 U	0.00138 U	0.00135 U	
	Heptachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00202 U	0.002 U	0.00204 U	0.00203 U	0.00199 U	0.00198 U	0.00206 U	0.00202 U	
	Octachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00202 U	0.002 U	0.00204 U	0.00203 U	0.00199 U	0.00198 U	0.00206 U	0.00202 U	
	Nonachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00336 U	0.00333 U	0.00340 U	0.00339 U	0.00331 U	0.00329 U	0.00344 U	0.00337 U	
	Decachlorobiphenyl	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.00336 U	0.00333 U	0.00340 U	0.00339 U	0.00331 U	0.00329 U	0.00344 U	0.00337 U	
	Total PCBs	0.07	0.07	0.1	0.3	0.45	0.6	0.45	0.05	0.3	0.441 J	0.343	0.564	0.456	0.343	0.383	0.559	0.526	

Notes:
ug/m3 - micrograms per cubic meter.
N/A - Not applicable.
U - Compound was not detected at specified quantitation limit.
Values in **Bold** indicate the compound was detected.
PCBs - Polychlorinated Biphenyls.