Fairfield Public Schools

Fairfield, CT 06825

TO:

Dr. David Title and Members of the Board of Education

FROM:

Thomas P. Cullen

DATE:

March 2, 2012

RE:

FLHS Window Replacement Project

PCB testing of two classrooms "Results"

This letter is to notify you that the Fairfield Public School district has received the laboratory results for the Polychlorinated Biphenyl (PCB) testing of two classrooms at the Fairfield Ludlowe High School. The testing performed in classrooms 203 and 220 was scheduled and performed on Saturday, February 11, 2012. I am happy to report at this time that the air sampling did not document the presence of any PCBs in the air and the wipe tests documented results below the actionable level per state regulations.

All results are posted on the Fairfield Public Schools website. The central office administration and the FLHS administrator will keep PCB test reports on file per State regulations.

If you have any questions or concerns regarding the PCB testing, please feel free to contact me at (203) 255-8373.

Thank you.



February 29, 2012

Mr. Tom Cullen Fairfield Public Schools 501 Kings Highway East Fairfield, CT 06824

RE: PCB Air and Wipe Sampling at Fairfield Ludlowe High School, Fairfield, CT

Dear Mr. Cullen:

INTRODUCTION

AMC Environmental was retained to obtain initial PCB in air samples and PCB wipe samples from two (2) rooms from Fairfield Ludlowe High School in Fairfield on February 11 & 12, 2012. The sampling was obtained from the areas where materials with the highest PCB concentrations were previously identified during the initial bulk sample Inspection associated with the anticipated window replacement project (see report dated October 21, 2011). These areas pose the greatest potential for direct exposure and release of PCB contaminants into the environment by way of air, dust, or soil.

BACKGROUND

Polychlorinated Biphenyl (PCB)

Polychlorinated biphenyls (PCBs) are a group of chemicals that contain 209 individual compounds (known as congeners) with varying harmful effects. The U.S. Environmental Protection Agency (EPA) treats all PCBs as being potentially hazardous based on results from some formulations. However, this can have large uncertainty for any given mixture situation. PCBs were domestically manufactured from 1929 until their manufacture was banned in 1979. They have a range of toxicity and vary in consistency from thin, light-colored liquids to yellow or black waxy solids. Due to their non-flammability, chemical stability, high boiling point, and electrical insulating properties, PCBs were used in hundreds of industrial and commercial applications including electrical, heat transfer, and hydraulic equipment; as plasticizers in paints, plastics, and rubber products; in pigments, dyes, and carbonless copy paper; and many other industrial applications. For this project, initial PCB samples were tested in caulks and window glazings throughout the building.

PCBs are no longer produced or used in the United States today; the major source of exposure to PCBs today is the redistribution of PCBs already present in soil and water. Chronic (long-term) exposure to some PCB formulations by inhalation in humans results in respiratory tract symptoms, gastrointestinal effects, mild liver effects, and effects on the skin and eyes such as chloracne, skin rashes, and eye irritation. Epidemiological studies indicate an association between dietary PCB exposures and developmental effects. Human studies provide inconclusive, yet suggestive, evidence of an association

Ah Environmen Ll

Pho 203.378.54 F. 203.375.73 Em: amc@amcenviro.c

> P.O Box 4 Stratford, (

Ludlowe High School February 29, 2012 Page 2 of 7

between PCBs exposure and cancer. Animal studies have reported an increase in liver tumors in rats and mice exposed orally to all tested PCB formulations. EPA has classified PCBs as a Group B2, probable human carcinogen.

PCB Air Samples

Public Health Levels for PCBs in Indoor School Air

The U.S. EPA has calculated prudent public health levels that maintain PCB exposures below the "reference dose" – the amount of PCB exposure that EPA does not believe will cause harm. EPA's reference dose (RfD) is 20 ng PCB/kg body weight per day. Indoor air levels are based upon EPA's understanding of average exposure to PCBs from all other major sources, and were calculated for all ages of children from toddlers in day-care to adolescents in high school as well as for adult school employees.

In calculating these indoor air levels, EPA considered potential sources of PCB exposure from both school and non-school environments. Non-school sources of PCB exposure include both indoor and outdoor air, indoor dust, outside soils, and diet. Although the concentrations of PCBs in environmental media are not well characterized, mean or median values from the scientific literature, and average contact rates, were used to estimate exposure. For non-school sources, the largest single source of PCB exposure for most individuals in uncontaminated buildings is diet, which contributes roughly 50 to 60% to total PCB exposure. Typical indoor and outdoor air contains a small amount of PCBs, and inhalation exposure accounts for another 25 to 35% of total exposure. Together, these non-school sources of PCBs generally result in exposures that are significantly below the reference dose. In addition, it is worth noting that the PCB concentrations in food have been decreasing and this trend would further decrease exposure.

School sources of PCBs that were considered include school indoor and outdoor air, indoor dust, and nearby outside soils. In calculating these public health levels for indoor air in schools, EPA assumed that the PCB concentrations in dusts and soils in and around schools were the same as in average homes or other buildings without elevated PCBs. EPA also assumed an 8-hour school day for adults and children less than 3 years old, and a 6.5 hour school for all other children. EPA also assumed children would be in school 180 days per year. Using estimates of exposure for sources except indoor air in schools, EPA calculated the school indoor air PCB concentration that would result in a total exposure equal to the reference dose. These calculated indoor air concentrations are the air concentration values provided in the table below.

EPA recommends that the concentrations of PCBs in indoor air be kept as low as is reasonably achievable and that total PCB exposure be kept below the reference dose level. The concentration values provided in the table below are based upon average situations. Spending less time in schools would decrease school exposure and cause the values to be higher. Spending more time in schools would have the opposite effect and would decrease the values. PCB concentrations in outdoor soils, indoor dusts, or indoor surfaces greater than those in background, non-school environments would suggest that exposure sources other than air in schools increase total exposure and, therefore, would decrease these air concentration values.

Public Health Levels of PCB's in School Indoor Air (ng/m3)

Assuming a background scenario of no significant PCB contamination in building materials and average exposure from other sources, these concentrations should keep total exposure below the reference dose of 20 ng PCB/KG-day.

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 High School	Age 19 + yr Adult
70	70	100	300	450	600	450

PCB Air Sampling

- A. Carefully remove the clean sample cartridge from the aluminum foil wrapping (the foil is returned to jars for later use) and attached to the pump with flexible tubing. The sampling assembly is positioned with the intake downward or in horizontal position. Locate the sampler in an unobstructed area at least 30 meters from any obstacle to air flow. The PUF or PUF/XAD-2 cartridge intake is positioned 1 to 2 m above ground level. Cartridge height above ground is recorded on the Compendium Method TO-10A field test data sheet (FTDS), as illustrated in Figure 5.
- B. After the PUF cartridge is correctly inserted and positioned, the power switch is turned on and the sampling begins. The elapsed time meter is activated and the start time is recorded. The pumps are checked during the sampling process and any abnormal conditions discovered are recorded on the FTDS. Ambient temperatures and barometric pressures are measured and recorded periodically during the sampling procedure on the FTDS. For this project, a low flow sampling pump was calibrated using a low flow rotometer. The samples were run at 2.5 liters per minute for a period of approximately 24 hours.
- C. At the end of the desired sampling period, the power is turned off, the PUF cartridge removed from the sampler and wrapped with the original aluminum foil and placed in a sealed, labeled container for transport, under blue ice (<4°C), back to the laboratory. Post calibration is conducted and recorded.

PCB Wipe Samples

AMC carefully obtained PCB wipe samples from Rooms 203 and 220. The greatest concentration (<50) of caulk and glazings were identified in these rooms, therefore was deemed a priority for further assessment. Non-porous surface samples were collected on the floors and window sills from each of these rooms to determine if surface contamination is present, and if so, at what levels. A standard wipe test as specified in 40CFR 761.123 uses a 10x10 cm template (or equivalent) to outline the sample area and a gauze pad to

Ludlowe High School February 29, 2012 Page 4 of 7

be saturated with Hexane to collect the sample. The Hexane saturated wipe is used to thoroughly wipe the area inside the 100 cm² template. The wipe media is then inserted into a 6 ounce sterilized glass jar and refrigerated until delivered to the lab. The sample analysis used for this process is the SOXHLET 8040 method.

The following lists the sampling procedure followed:

An Example of a Wipe Sampling Procedure

- a) Ensure that the exact sampling site has been marked to a 100 cm² surface area.
- b) With gloved hands, remove the cap from the sampling vial. A 6 ounce sterilized glass jar was used for the sample jar.
- c) With the forceps, remove the gauze from the sampling vial.
- d) From a solvent bottle, use the volumetric delivery device or fill a graduated cylinder with 5 milliliters of solvent to the gauze. The solvent used in this procedure was Hexane.
- e) Immediately begin applying the gauze using a gloved hand and, applying pressure, wipe the marked area completely twice, from left to right and then from top to bottom.
- f) Let the gauze air dry.
- g) Fold the dry gauze (sampled side inward) and return it to the sample vial.
- h) Cap the sample vial.
- i) Remove and discard the gloves.
- j) Label the vial and fill out sampling details on the sampling forms.
- k) Fill out chain of custody forms and prepare the sample for storage and shipping.

RESULTS

Air Samples

Results of the PCB in air samples obtained from Room 203, Room 220 and the Corridor did not document the presence of any PCBs in the air. Therefore Room 203, Room 220 and the Corridor are acceptable and under the PCB in air in school threshold of 20 ng of PCB/kg a day.

Wipe Samples

Results of the PCB in wipe samples obtained from the floor and window sills in Room 203 and Room 220 documented results below the actionable level of 10 ug/cm² and therefore are <u>acceptable</u>. Room 203 had detectable levels of PCBs (1.6 ug/cm²), however the concentrations were significantly lower than the 10ug/cm² threshold.

Ludlowe High School February 29, 2012 Page 5 of 7

CONCLUSION

Overall, the samples obtained documented no presence of airborne PCB in Room 220 and 203 and the Corridor. The PCB dust wipe sampling documented no PCBs or PCBs well below the 10 ug/cm² threshold within the areas tested. Therefore all sample results for February 11, 2012 are considered to be acceptable. The testing was limited and restricted to only two rooms within the building. This included Rooms 220 and 203. Moving forward, a full assessment of the various homogeneous window caulking and glazing should be administered to assess all potential hazards that may be present within the building. AMC is prepared to conduct a comprehensive inspection of existing building materials and surrounding substrates and soils to accurately identify the location and extent of PCB and PCB contamination that may be present. At minimum, ongoing surveillance and monitoring of surfaces should be administered until a more permanent solution can be developed.

Very truly yours,

Richard Onofrio

Environmental Consultant

Hickord Origins

RO:so

Enclosure

References: www.epa.gov/epawaste/hazard/tsd/pcbs/index.htm www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/about.htm Ludlowe High School February 29, 2012 Page 6 of 7

<u>Laboratory Results – PCB Air Samples</u>



Monday, February 20, 2012

AMC Environmental PO Box 423 Stratford, CT 06497

Project ID:

LUDLOW HS FAIRFIELD

Sample ID#s: BB42958 - BB42960

This laboratory is in compliance with the QA/QC procedures outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, SW846 QA/QC and NELAC requirements of procedures used.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Laboratory Director

NELAC - #NY11301

CT Lab Registration #PH-0618

MA Lab Registration #MA-CT-007

ME Lab Registration #CT-007

NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003

NY Lab Registration #11301

PA Lab Registration #68-03530

RI Lab Registration #63

VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 20, 2012

FOR:

AMC Environmental

PO Box 423

Stratford, CT 06497

Sample Information

Location Code:

Rush Request:

AIR

AMCENV

Standard

Custody Information Collected by:

Received by: Analyzed by:

SW see "By" below 02/11/12

Date

<u>Time</u> 0:00

02/13/12

16:36

P.O.#:

Matrix:

Laboratory Data

SDG ID: GBB42958

Phoenix ID: BB42958

Project ID:

LUDLOW HS FAIRFIELD

Client ID:

PCB AIR-01/RM 203

Parameter	Result	RL.	Units	Date	Time	Ву	Reference	
Extraction for PCB for Puff samples	Completed			02/13/12		BB/K	SW3540C	1
Polychlorinated Biphenyls								
PCB-1016	ND	0.05	ug/m3	02/14/12		мн	EPA TO-10A	
PCB-1221	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1232	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1242	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1248	ND .	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1254	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1260	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1262	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1268	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
QA/QC Surrogates								
% DCBP	96		%	02/14/12		MH	30 - 150 %	
% TCMX	93		%	02/14/12		MH	30 - 150 %	

^{1 =} This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200. ND=Not detected BDL=Below Detection Level RL=Reporting Level

This report must not be reproduced except in full as defined by the attached chain of custody.

Phyllis/Shiller, Laboratory Director



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



Time

0:00

16:36

Analysis Report

February 20, 2012

FOR:

AMC Environmental

PO Box 423

Stratford, CT 06497

Sample Information

Matrix:

P.O.#:

AIR

AMCENV

Location Code:

Standard

Received by: Analyzed by:

Collected by:

SW

see "By" below

Laboratory Data

Custody Information

SDG ID: GBB42958

Phoenix ID: BB42959

Date

02/11/12

02/13/12

Project ID:

Rush Request:

LUDLOW HS FAIRFIELD

Client ID:

PCB AIR-02/RM 220

Parameter	Result	RL.	Units	Date	Time	Ву	Reference	
Extraction for PCB for Puff samples	Completed		· · · · · · · · · · · · · · · · · · ·	02/13/12		BB/K	SW3540C	1
Polychlorinated Biphenyls								
PCB-1016	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1221	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1232	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1242	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1248	ND	0.05	ug/m3	02/14/12	•	MH	EPA TO-10A	
PCB-1254	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1260	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1262	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1268	ND ·	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
OA/OC Surrogates								
% DCBP	. 96		%	02/14/12		мн	30 - 150 %	
% TCMX	90		%	02/14/12		МН	30 - 150 %	

^{1 =} This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

Comments:

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ND=Not detected BDL=Below Detection Level RL=Reporting Level

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Phyllis/Shiller, Laboratory Director



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 20, 2012

FOR:

Custody Information

Collected by:

AMC Environmental

PO Box 423

Stratford, CT 06497

Sample Information

Matrix:

AIR

AMCENV

Standard

Received by: Analyzed by: SW

see "By" below

02/11/12 02/13/12

<u>Date</u>

0:00

Time

16:36

P.O.#:

Laboratory Data

SDG ID: GBB42958 Phoenix ID: BB42960

Project ID:

Location Code:

Rush Request:

LUDLOW HS FAIRFIELD

Client ID:

PCB AIR-03/CORRIDOR

Parameter	Result	RL	Units	Date	Time	Ву	Reference	
Extraction for PCB for Puff samples	Completed			02/13/12		BB/K	SW3540C	1
Polychlorinated Biphenyls								
PCB-1016	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1221	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1232	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1242	ND	0.05	ug/m3	02/14/12		мн	EPA TO-10A	
PCB-1248	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1254	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
PCB-1260	ND	0.05	ug/m3	02/14/12		МН	EPA TO-10A	
PCB-1262	ND	0.05	ug/m3	02/14/12		мн	EPA TO-10A	
PCB-1268 ·	ND	0.05	ug/m3	02/14/12		MH	EPA TO-10A	
OA/OC Surrogates			-					
% DCBP	96		%	02/14/12		МН	30 - 150 %	
% TCMX	93		%.	02/14/12		МН	30 - 150 %	

^{1 =} This parameter is not certified by NY NELAC for this matrix. NY NELAC does not offer certification for all parameters.

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

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Phyllis/Shiller, Laboratory Director



Environmental Laboratories, Inc. 587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



QA/QC Report

February 20, 2012

QA/QC Data

SDG I.D.: GBB42958

Parameter	Blank	LCS %	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits	
QA/QC Batch 194319, QC Sa	ample No: BB42958 (BB42	958, BB42959, BB4	2960)				A			
Polychlorinated Bipher	ıyls	-	•					٠		
PCB-1016	ND	85	88	3.5				40 - 140	30	
PCB-1221	ND	•						40 - 140	30	
PCB-1232	ND							40 - 140	30	
PCB-1242	ND							40 - 140	30	
PCB-1248	ND						•	40 - 140	30	
PCB-1254	ND		,					40 - 140	30	
PCB-1260	ND	108	105	2.8				40 - 140	30	
PCB-1262	ND							40 - 140	30	
PCB-1268	ND							40 - 140	30	
% DCBP (Surrogate Rec)	87	94	94	0.0				30 - 150	30	
% TCMX (Surrogate Rec) Comment:	74	81	79	2.5				30 - 150	30	
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If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Phyllis/Shiller, Laboratory Director

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CHAIN OF CUSTODY RECORD	587 East Middle Turnpike, P.O. Box 370, Manchester, CT 06040 Email: info@phoenixlabs.com Fax (860) 645-0823 Client Services (860) 645-8726	3	Analysis Request	ater 10.00	Sampled				Date: Time:	2/13/12 16:36	Turnaround;	SURCHARGE APPLIES
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٠-ال	OHCTEC CO.		(860) 645-8726	Client Services (860)		Environmental Laboratories, Inc.	Environme
	12-1		Manchester, CT 0604 ax (860) 645-0823	587 East Middle Tumpike, P.O. Box 370. Manchester, CT 06040 Email: info@ohgenixlabs.com Fax (860) 645-0823	587 East		MAG
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Ludlowe High School February 29, 2012 Page 7 of 7

<u>Laboratory Results – PCB Wipe Samples</u>



Thursday, February 16, 2012

AMC Environmental PO Box 423 Stratford, CT 06497

Project ID:

LUDLOW AT SCHOOL FAIRFIELD

Sample ID#s: BB42961 - BB42964

This laboratory is in compliance with the QA/QC procedures outlined in EPA 600/4-79-019, Handbook for Analytical Quality in Water and Waste Water, March 1979, SW846 QA/QC and NELAC requirements of procedures used.

This report contains results for the parameters tested, under the sampling conditions described on the Chain Of Custody, as received by the laboratory.

A scanned version of the COC form accompanies the analytical report and is an exact duplicate of the original.

If you have any questions concerning this testing, please do not hesitate to contact Phoenix Client Services at ext. 200.

Sincerely yours,

Phyllis Shiller

Laboratory Director

NELAC - #NY11301

CT Lab Registration #PH-0618

MA Lab Registration #MA-CT-007

ME Lab Registration #CT-007

NH Lab Registration #213693-A,B

NJ Lab Registration #CT-003

NY Lab Registration #11301

PA Lab Registration #68-03530

RI Lab Registration #63

VT Lab Registration #VT11301



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102

Fax (860) 645-0823



Analysis Report

February 16, 2012

FOR:

AMC Environmental

PO Box 423

Stratford, CT 06497

Sampl	<u>le Inforn</u>	nation

Matrix:

P.O.#:

WIPE

AMCENV

Standard

Custody Information

Collected by:

Received by: Analyzed by:

SW

see "By" below

02/11/12 02/13/12

Date

Time 11:30

16:36

Phoenix ID: BB42961

Laboratory Data

SDG ID: GBB42961

Project ID:

Location Code:

Rush Request:

LUDLOW AT SCHOOL FAIRFIELD

Client ID:

PCB-01/RM 203-FLOOR

Parameter	Result	RL	Units	Date	Time	Ву	Reference
PCB Wipe Extraction	Completed	*****		02/13/12		BB/K	SW-3540C
Polychlorinated Bipheny	ls						
PCB-1016	ND	1.0	ug	02/14/12		мн	SW8082
PCB-1221	ND	1.0	ug	02/14/12		МН	SW8082
PCB-1232	ND	1.0	ug	02/14/12		MH	SW8082
PCB-1242	ND	1.0	ug	02/14/12		MH	SW8082
PCB-1248	ND	1.0	ug	02/14/12		МН	SW8082
PCB-1254	ND	1.0	ug	02/14/12		МН	SW8082
PCB-1260	ND	1.0	ug	02/14/12		MH	SW8082
PCB-1262	ND	1.0	ug	02/14/12		МН	SW8082
PCB-1268	ND ⁻	1.0	ug	02/14/12		МН	SW8082
OA/OC Surrogates			-				
% DCBP	89		%	02/14/12		MH	30 - 150 %
% TCMX	86		%	02/14/12		МН	30 - 150 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200. ND=Not detected BDL=Below Detection Level RL=Reporting Level

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Phyllis Shiller, Laboratory Director



587 East Middle Turnpike, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 16, 2012

FOR:

AMC Environmental

PO Box 423

Stratford, CT 06497

Sample Information

WIPE

Custody Information

Date

Time

Matrix:

Collected by:

02/11/12

11:30

Location Code:

AMCENV

Received by:

SW

02/13/12

16:36

Rush Request:

Standard

Analyzed by:

see "By" below

P.O.#:

Laboratory Data

SDG ID: GBB42961 Phoenix ID: BB42962

Project ID:

LUDLOW AT SCHOOL FAIRFIELD

Client ID:

PCB-02/RM 203-WINDSILL

Parameter	Result	RL	Units	Date	Time	Ву	Reference
PCB Wipe Extraction	Completed			02/13/12		BB/K	SW-3540C
Polychlorinated Biphenyls							
PCB-1016	ND	1.0	ug	02/14/12		мн	SW8082
PCB-1221	ND	1.0	ug	02/14/12		мн	SW8082
PCB-1232	ND ·	1.0	ug	02/14/12		мн	SW8082
PCB-1242	- ND	1.0	ug	02/14/12		MH	SW8082
PCB-1248	ND	1.0	ug '	02/14/12		мн	SW8082
PCB-1254	ND	1.0	ug	02/14/12		мн	SW8082
PCB-1260	1.6	1.0	ug	02/14/12		МН	SW8082
PCB-1262	ND	1.0	ug	02/14/12		МН	SW8082
PCB-1268	ND	1.0	ug	02/14/12		MH	SW8082
OA/OC Surrogates			-				
% DCBP	88		%	02/14/12		MH	30 - 150 %
% TCMX	84		%	02/14/12		МН	30 - 150 %

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200. ND=Not detected BDL=Below Detection Level RL=Reporting Level

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Phyllis/Shiller, Laboratory Director



587 East Middle Turnplke, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



Analysis Report

February 16, 2012

FOR:

AMC Environmental

PO Box 423

Stratford, CT 06497

Sample Information

Matrix:

WIPE

Collected by:

<u>Date</u> <u>Time</u> 02/11/12

Location Code:

AMCENV

Received by:

SW

02/13/12

11:30

Rush Request:

Standard

Analyzed by:

see "By" below

16:36

P.O.#:

Laboratory Data

Custody Information

SDG ID: GBB42961

Phoenix ID: BB42963

Project ID:

LUDLOW AT SCHOOL FAIRFIELD

Client ID:

PCB-03/RM 220-FLOOR

Parameter	Result	RL	Units	Date	Time	Ву	Reference	
PCB Wipe Extraction	Completed			02/13/12		BB/K	SW-3540C	
Polychlorinated Biphenyls								
PCB-1016	ND ·	1.0	ug	02/14/12		МН	SW8082	
PCB-1221	ND	1.0	ug	02/14/12		MH	SW8082	
PCB-1232	ND	1.0	ug	02/14/12		МН	SW8082	
PCB-1242	ND	1.0	ug	02/14/12		МН	SW8082	
PCB-1248	ND	1.0	ug	02/14/12	ě.	мн	SW8082	
PCB-1254	ND	1.0	ug	02/14/12		мн	SW8082	
PCB-1260	ND	1.0	ug	02/14/12		MH	SW8082	
PCB-1262	ND	1.0	ug	02/14/12		МН	SW8082	
PCB-1268	ND	1.0	ug	02/14/12		МН	SW8082	
OA/OC Surrogates								
% DCBP	103		%	02/14/12		МН	30 - 150 %	
% TCMX	90		%	02/14/12		МН	30 - 150 %	

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200. ND=Not detected BDL=Below Detection Level RL=Reporting Level

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Phyllis Shiller, Laboratory Director



587 East Middle Turnplke, P.O.Box 370, Manchester, CT 06045 Tel. (860) 645-1102 Fax (860) 645-0823



Time

11:30

16:36

Analysis Report

February 16, 2012

FOR:

Custody Information

AMC Environmental

PO Box 423

Stratford, CT 06497

Sample Information

Matrix:

Location Code:

Rush Request:

WIPE

AMCENV

Standard

Collected by:

Received by: Analyzed by:

SW

see "By" below

P.O.#:

Laboratory Data

SDG ID: GBB42961

Phoenix ID: BB42964

Date

02/11/12

02/13/12

Project ID:

LUDLOW AT SCHOOL FAIRFIELD

Client ID:

PCB-04/RM 220-WINDSILL

Parameter	Result	RL	Units	Date	Time	Ву	Reference	
PCB Wipe Extraction	Completed			02/13/12		BB/K	SW-3540C	
Polychlorinated Biphenyls								
PCB-1016	ND	1.0	ug	02/14/12		MH	SW8082	
PCB-1221	ND	1.0	ug	02/14/12		мн	SW8082	
PCB-1232	ND	1.0	ug	02/14/12		МН	SW8082	
PCB-1242	ND	1.0	ug	02/14/12		MH	SW8082	
PCB-1248	ND	1.0	ug	02/14/12		нМ	SW8082	
PCB-1254	ND	1.0	ug	02/14/12		мн	SW8082	
PCB-1260	ND	1.0	ug	02/14/12		мн	SW8082	
PCB-1262	ND	1.0	ug	02/14/12		MH	SW8082	
PCB-1268	ND	1.0	ug	02/14/12		MH	SW8082	
OA/QC Surrogates			_					
% DCBP	95		%	02/14/12		MH	30 - 150 %	
% TCMX	90		%	02/14/12		МН	30 - 150 %	

Comments:

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

ND=Not detected BDL=Below Detection Level RL=Reporting Level

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Phyllis Shiller, Laboratory Director



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QA/QC Report

February 16, 2012

QA/QC Data

SDG I.D.: GBB42961

QA/QC Batch 193386, QC Sample No: BB3 Polychlorinated Biphenyl PCB-1016 ND PCB-1016 ND PCB-1221 ND PCB-1222 ND PCB-1232 ND PCB-1242 ND PCB-1248 ND PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed instead QA/QC Batch 194248, QC Sample No: BB-	LCS **	LCSD %	LCS RPD	MS %	MSD %	MS RPD	% Rec Limits	% RPD Limits
PCB-1016 ND PCB-1221 ND PCB-1232 ND PCB-1242 ND PCB-1248 ND PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed instead	8036 (BB42964)		***************************************	The second second second second			······································	
PCB-1221 ND PCB-1232 ND PCB-1242 ND PCB-1248 ND PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed instead								
PCB-1232 ND PCB-1242 ND PCB-1248 ND PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed instead	107	105	1.9				40 - 140	30
PCB-1242 ND PCB-1248 ND PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed instead							40 - 140	30
PCB-1248 ND PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed instead							40 - 140	30
PCB-1254 ND PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed inste							40 - 140	30
PCB-1260 ND PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed inste							40 - 140	30
PCB-1262 ND PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed inste							40 - 140	30
PCB-1268 ND % DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed inste	101	104	2.9				40 - 140	30
% DCBP (Surrogate Rec) 80 % TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed inste							40 - 140	30
% TCMX (Surrogate Rec) 83 Comment: A LCS and LCS Duplicate were performed inste	•						40 - 140	30
Comment: A LCS and LCS Duplicate were performed inste	· 81	84	3.6				30 - 150	30
A LCS and LCS Duplicate were performed inste	82	85	3.6				30 - 150	30
•								
QA/QC Batch 194248, QC Sample No: BB	ad of a matrix spike and matrix spike	duplicate						
	12513 (BB42961, BB42962, BB4	12963)						
Polychlorinated Biphenyl								
PCB-1016 ND	99	103	4.0				40 - 140	50
PCB-1221 ND	55	103	4.0					30
PCB-1232 ND							40 - 140 40 - 140	30
PCB-1242 ND							40 - 140	30
PCB-1248 ND							40 - 140	30 30
PCB-1254 ND							40 - 140	30
PCB-1260 ND	105	110	4.7				40 - 140	30
PCB-1262 ND	103	110	4.7				40 - 140	30 30
PCB-1268 ND	•		-				40 - 140	30
% DCBP (Surrogate Rec) 97	97	98	1.0				30 - 150	30
% TCMX (Surrogate Rec) 83	78	80	2.5				30 - 150	30
Comment:	78	QU.	2.0				90 - 13u	30
A LCS and LCS Duplicate were performed instr	and of a market will be and market as to		_					

If there are any questions regarding this data, please call Phoenix Client Services at extension 200.

RPD - Relative Percent Difference

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MS Dup - Matrix Spike Duplicate

NC - No Criteria

Phyllis Shiller, Laboratory Director

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