Fairfield Public Schools Fairfield, CT 06825

TO:

Dr. David Title and Members of the Board of Education

FROM:

Salvatore Morabito

DATE:

June 12, 2012

RE:

Osborn Hill Window Replacement Project Testing Additional PCB Testing Following Cleaning "Results"

This letter is to notify you that the Fairfield Public School District has received the laboratory results for the additional Polychlorinated Biphenyl (PCB) testing following the specialized cleaning conducted at Osborn Hill School on the evening of Friday, May 25, 2012. The additional testing was performed in classroom 116, the corridor leading to the Gymnasium, and adjacent areas.

Our testing company has notified both the CT DEEP and the EPA of its findings. In addition to these notifications, we have consulted the local Health Department Director. The test reports indicate that the PCB levels in room 116 are below the EPA recommended limits. The test reports also indicate that while substantial progress has been made in lowering the PCB levels in the corridor leading to the Gymnasium, these levels remain slightly above the EPA recommended limits.

An additional cleaning will be scheduled for the affected corridor area as soon as possible. Additional testing will be conducted to confirm that this follow up cleaning has brought the PCB levels to below the EPA recommended limits. All results will be posted on the Fairfield Public Schools' website when received. The Central Office administration and the Osborn Hill School Principal will keep PCB test reports on file per State regulations.

In response to the posting of previous test results for this building, several questions have been received. These questions and answers are as follows:

- Q: Has the district shared the actual test results with parents?
- A: Yes. This information was shared with the school, the school PTA, the school's Tools for Schools Committee and the school's parents via an e-blast notification from the school. Copies of the results can be found at:

 http://www.fairfieldschools.org/pop/hazard popup.htm.
- Q: Who spoke with the EPA?
- A: Our testing consultant, AMC Environmental, spoke with both the EPA and CT DEEP regarding the test results and follow up actions to be undertaken.

Fairfield Public Schools Fairfield, CT 06825

- Q: Did the EPA say it is safe to keep children in the building?
- A: The EPA and CT DEEP are aware of the test results and have advised that evacuation is not necessary. Instead, they recommend that steps be taken to reduce exposure. This is the process that we are going through now.
- Q: Is the district in compliance with EPA regulations for PCB?
- A: The district is in compliance with EPA requirements for posting of test results and following EPA and CT DEEP regulations. As summarized in the attached report there are still some slightly elevated test results that indicate additional steps (cleaning and follow up testing) are required.
- Q: Has the district checked or tested for other sources of PCBs such as lighting fixtures or the ventilation system?
- A: The district has confirmed that all of the ceilings and lights were replaced in the 1996 renovation of Osborn Hill and therefore are not a possible source of PCBs. The ventilation system will be checked (tested) in the next round of tests.
- Q: What are the steps and timeline to make a funding request for the replacement of the windows?
- A: There are 4 steps to the process:

Step One.

Initial pre-renovation hazardous material inspection.

Includes lead paint, asbestos, and Polychlorinated Biphenyl (PCB) sampling to build a history of what (if any) hazardous materials are in or around the windows. *Step Two*.

Polychlorinated Biphenyl (PCB) testing and inspection.

Includes wipe tests and air tests based on what is found from Step One inspection. *Step Three*.

Polychlorinated Biphenyl (PCB) core sampling of masonry materials.

Includes drilling into masonry materials to take dust samples based on what is found from Steps One and Two.

Step Four.

Completion of all testing and the building of a Polychlorinated Biphenyl (PCB) remediation plan. The remediation plan is developed and submitted to the EPA and the CT DEEP for approval. Once the plan is approved, a funding request can be made.

Step One is completed at this time and we are involved with Step Two testing results which is requiring a specialized cleaning process and retesting. Steps Three and Four will be based on information and recommendations from the EPA and CT DEEP.

We expect to have a funding request ready in the fall but this is dependent on how long the CT DEEP and the EPA take to approve the remediation plan.

Fairfield Public Schools Fairfield, CT 06825

If you have any questions or concerns regarding the specialized cleaning or the PCB testing, please feel free to contact me at (203) 255-7363.

Thank you.

c: Bev Dyer Central Office Administration Sands Cleary



June 12, 2012

Mr. Sal Morabito Fairfield Public Schools 501 Kings Highway East Fairfield, CT 06824

RE: PCB Air and Wipe Sampling at Osborne Hill Elementary School, Fairfield, CT

Dear Mr. Morabito:

INTRODUCTION

AMC Environmental was retained to obtain initial PCB in air samples and PCB wipe samples from classroom 116 and the corridor outside the gymnasium at Osborne Hill Elementary School in Fairfield on May 4 and 7, 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 April 25, 2012). AMC returned to Osborne Hill School on May 26, 2012 to complete follow-up PCB air and wipe sampling after the cleaning of the corridor outside the gym as well as room 116.

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 glazing 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

AMC Environmental, LLC

Phone: 203.378.5020 Fax: 203.375.7344 Email:

amc@amcenviro.com

P.O Box 423 Stratford, CT 06615 Osborne Hill School June 12, 2012 Page 2 of 9

effects. Human studies provide inconclusive, yet suggestive, evidence of an association 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 nanograms (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. The PCB in air action level set by the EPA is 450 ng/m³. The action level used for this testing is 300 ng/m³ of air due to presence of children between the ages of six (6) and twelve (12) years old.

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 or action 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,

Osborne Hill School June 12, 2012 Page 3 of 9

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.

average ex	a background	scenario of no other sources,	s of PCB's in School significant PCB these concentral day.	contaminati	on in buildina	materials and posure below
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

1,000 ng/m³ = 1 ug/m³ One thousand nanograms per cubic meter are equal to one microgram per cubic meter of air.

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.
- 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 high flow sampling pump was calibrated using a high flow rotometer. The samples were run at 5 liters per minute for a period of approximately 4 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 116 and from the hallway outside the gymnasium. The greatest concentration (>50) of caulk and glazing 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

Osborne Hill School June 12, 2012 Page 4 of 9

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 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 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 on the three separate visits to Osborne Hill School are listed below for comparison.

PCB Air Sample Table

 $1,000 \text{ ng/m}^3 = 1 \text{ ug/m}^3$

Sample Number	Location	Results Ug/m³
	May 4, 2012	
PCB-Air-01	Hallway Outside Gymnasium	0.72 ug/m³
PCB-Air-02	Inside Classroom 116	0.099 ug/m ³

Sample Number	Location	Results Ug/m³
	May 26, 2012	
PCB-Air-01	Boiler Room Hall	0.30 ug/m ³
PCB-Air-02	Inside Classroom 125	0.24 ug/m ³
PCB-Air-03	Inside Classroom 116	0.10 ug/m ³
PCB-Air-04	Hall Outside Room 119	0.36 ug/m ³
PCB-Air-05*	Hall Outside Gymnasium	1.1 ug/m ³
PCB-Air-06	Hall Outside Cafeteria	0.41 ug/m ³
PCB-Air-07	Inside Classroom 110	0.17 ug/m ³
PCB-Air-08	Hall Outside Room 104	0.20 ug/m ³

* Sample PCB-Air-05 was analyzed on a RUSH turnaround time.

PCB-Air-01	Hall Outside Gymnasium	0.34 ug/m ³
	June 2, 2012	
Sample Number	Location	Results Ug/m³

Samples listed in bold in the above tables document samples above the 300 ng/m³ limit.

On May 4, 2012, AMC Environmental made a site visit to Osborne Hill School to obtain PCB in air samples from specific areas within the school. The areas tested were chosen based on elevated bulk sample results identified during a window inspection. The two areas deemed necessary included the hallway outside the gymnasium and room 116. PCBs in the air were identified in both areas. Sample analysis document the air inside room 116 was lower than the EPA action level of 300 ng/m³ for an elementary school. The sample obtained in the hallway outside the gym documented elevated levels of PCB in air. Due to this elevated concentration, AMC recommended that an immediate cleaning response be implemented and follow up testing be performed.

AMC developed a simple guidance document on how to properly clean the area. AAIS Corporation was hired to perform the work and was issued the cleaning document. AAIS mobilized at Osborne Hill School on the 25th of May and proceeded with the cleaning in the specified locations. As part of the cleaning efforts, negative air filtration devises were strategically placed throughout the school and exhausted outside of the building. The purpose of this process was to help filter and circulate indoor air from within the school. All work was done after school hours and on the weekend when no children were present. The machines ran over night and follow up testing was conducted the following day. Typically, following a cleaning project with use of air filtration systems, concentrations of PCB's within the air may initially spike, and then eventually subside. Sampling was performed immediately following the cleaning project throughout the school on May 26, 2012 which was as Saturday.

Eight air samples were taken from within the school as illustrated in the table above. Three of the eight samples documented elevated levels of PCB's in air. Results of PCB in air

Osborne Hill School June 12, 2012 Page 6 of 9

samples obtained from the main hallway outside of the gymnasium, hallway outside classroom 119 and the hallway outside the cafeteria documented elevated levels of PCB's in the air. The sample obtained from the hallway outside of the gym in-fact increased following the cleaning activities. This increase may be considered typical based on the sampling was performed the day after cleaning was completed. Therefore, the sample results in the hallway outside the gymnasium, the hallway outside classroom 119 and the hallway outside the cafeteria are <u>not acceptable</u> under the PCB in air action level of 300 ng/m³. Further cleaning efforts and investigation is recommended at this time.

A follow-up PCB in air sample was obtained on June 2, 2012 in the hallway outside the gymnasium where the elevated level was documented. The result of the air sample is still considered unacceptable; however the concentration was reduced significantly. The final result of the air sample was 340 ng/m³ of air, just over the 300ng/m³ of air threshold. Further action is recommended in order to comply with the PCB in air action level of 300 ng/m³ of air.

Wipe Samples

Results of the PCB in wipe samples obtained from the floor and window sills in Room 116 and the hallway outside the gym are documented in the tables below. Previous samples obtained on May 4, 2012 are listed for comparison.

PCB Wipe Sample Table

Sample Number	Location The Control of the Control	Results ug/wipe
	May 4, 2012	
PCB-Wipe-01	Hall Outside Gymnasium – Floor	4.2 ug/wipe
PCB-Wipe-02	Hall Outside Gymnasium – Window Sill	4.2 ug/wipe
PCB-Wipe-03	Room 116 – Floor	1.7 ug/wipe
PCB-Wipe-04	Room 116 – Window Sill	ND

Sample Number	Location	Results ug/wipe
	May 26, 2012	
PCB-Wipe-01	Hall Outside Gymnasium – Floor	3.2 ug/wipe
PCB-Wipe-02	Hall Outside Gymnasium – Floor	4.3 ug/wipe
PCB-Wipe-03	Hall Outside Gymnasium – Window Sill	3.2 ug/wipe
PCB-Wipe-04	Room 116 – Floor	0.23 ug/wipe
PCB-Wipe-05	Room 116 – Window Sill	0.74 ug/wipe

^{*} Samples listed in bold in the above table document samples above the 1 ug/100 cm³ limit. The surface are of each wipe is 100cm².

The wipe obtained from the floor and the window sill in Room 116 had detectable levels of PCBs (0.23 ug/100 cm² and 0.74 ug/100 cm²); this concentration is below the State and Federal action level of 1 ug/100 cm² threshold and therefore <u>acceptable</u>.

Osborne Hill School June 12, 2012 Page 7 of 9

Results of the three (3) PCB wipe samples obtained from the hallway outside the gymnasium exceeded the 1.0 ug/100cm² action level. The floor samples in the hallway documented levels of 3.2 ug/100 cm² and 4.3 ug/cm² and the window sill documented concentration of 3.2 ug/100 cm². Therefore these samples are considered unacceptable and further action is recommended.

CONCLUSION

Overall, the samples obtained during the course of the sampling at Osborne Hill School illustrate variable concentrations of PCB in the air and in the form of dust on the floor and window sills. During several site visits, sample analysis demonstrate that the most significant of the concerns is the presence of airborne PCB concentration in excess of the permissible action level of 300 ng/m³, which was found in the hallway outside of the gym, the hallway outside the cafeteria, and the hallway outside room 119. The unacceptable levels likely originate from the elevated window glazing and caulking identified in the initial window inspection. The sampling performed on May 26, 2012 was conducted following a cleaning effort from the previous night. The cleaning likely caused the spike in PCB concentrations within the work area and adjacent areas. The follow up visit on June 2nd documented significantly lower PCB in air concentrations then the previous sample, within the same work area. Additional sampling is recommended and further cleaning efforts may be warranted.

PCB dust was also documented during the site visits. Wipe samples were obtained from rooms 116 and the hallway outside the gym. Initial samples identified slightly elevated PCB wipe samples within the floor of room 116 and both the floor and window sill in the hallway outside the gym. After the cleaning efforts on May 25, the classroom wipe samples documented acceptable levels. Surprisingly, the wipes obtained in the hallway outside the gym showed little to no change in concentration, therefore categorizing them as unacceptable. Additional cleaning is recommended in this area. AMC also recommends further investigation into the possibility of additional sources of PCB hazards within the school that may be contributing to the elevated air samples. This may include HVAC and ventilation systems, lighting ballasts as well as additional areas of elevated caulking. AMC is working toward the development of a remediation plan to eliminate all sources of contaminated caulking and glazing from within Osborne Hill School.

Very truly yours,

Richard Onofrio

Environmental Consultant

Hickord Onefino

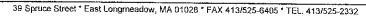
RO:so

Enclosure

References:

www.epa.gov/epawaste/hazard/tsd/pcbs/index.htm www.epa.gov/epawaste/hazard/tsd/pcbs/pubs/about.htm Osborne Hill School June 12, 2012 Page 8 of 9

Laboratory Results – PCB Air Samples





June 1, 2012

Jason Pringle AMC Environmental, LLC PO Box 423 Stratford, CT 06615

Project Location: Osborne Hill School

Client Job Number: Project Number: [none]

Laboratory Work Order Number: 12E1018

Enclosed are results of analyses for samples received by the laboratory on May 29, 2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely, Lua Washington

Lisa A. Worthington Project Manager



AMC Environmental, LLC

REPORT DATE: 6/1/2012

PO Box 423 Stratford, CT 06615 ATTN: Jason Pringle

PURCHASE ORDER NUMBER:

PROJECT NUMBER;

[none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER:

12E1018

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Osborne Hill School

FIELD SAMPLE #

LAB ID: MATRIX

Air

SAMPLE DESCRIPTION

TEST

SUB LAB

PCB-Air-05

12E1018-01

Hall O/S Gym 119

TO-10A/EPA 680

Modified



CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

TO-10A/EPA 680 Modified

Qualifications:

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:

Heptachlorobiphenyls, Hexachlorobiphenyls, Total Polychlorinated biphenyls 12E1018-01[PCB-Air-05], B052397-BLK1, B052397-BS1, B052397-BSD1

Data is not affected by elevated level in blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:

Hexachlorobiphenyls, Total Polychlorinated biphenyls 12E1018-01[PCB-Air-05], B052397-BLK1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren I. Damboragian Laboratory Manager



ANALYTICAL RESULTS

Project Location: Osborne Hill School

Date Received: 5/29/2012
Field Sample #: PCB-Air-05
Sample ID: 12E1018-01

Sample Matrix: Air Sampled: 5/26/2012 11:55 Sample Description/Location: Half O/S Gym 119

Sub Description/Location:

Work Order: 12E1018

Flow Controller ID: Sample Type:

Air Volume L: 1200

TO-10A/EPA 680 Modified

	Tota	մ բջ		ug	/m3		Date/l'ime					
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst				
Monochlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 0:03	СЈМ				
Dichlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 0:03	СЈМ				
Trichlorobiphenyls	0,010	0.0010		0.0084	0.00083	1	6/1/12 0:03	СЈМ				
Tetrachlorobiphenyls	0.30	0.0020		0.25	0.0017	1	6/1/12 0:03	СЈМ				
Pentachlorobiphenyls	0.79	0.0020		0.66	0.0017	ı	6/1/12 0:03	СЈМ				
Hexachlorobinhenyls	0.21	0.0020	B-07, B	0.18	0.0017	1	6/1/12 0:03	СЈМ				
Heptachlorobiphenyls	0,014	0,0030	B	0.011	0.0025	1	6/1/12 0:03	СЈМ				
Octachlorobiphenyls	ND	0.0030		ND	0.0025	1	6/1/12 0:03	СЈМ				
Nonachlorobiphenyls	DM	0.0050		ND	0.0042	1	6/1/12 0:03	CJM				
Decachlorobiphenyl	ND	0.0050		ND	0.0042	1	6/1/12 0:03	СЈМ				
Total Polychlorinated biphenyls	1.3		B-07, B	1.1		1	6/1/12 0:03	СЈМ				
Surrogates	% Recu	very		% RE	C Limits							
Tetrachioro-m-xylene		92.3			0-125		6/1/12 0:03					



Sample Extraction Data

Prep Method: SW-846 3540C-TO-10A/EPA 680 Modified

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date	
12E1018-01 [PCB-Air-05]	B052397	1.00	1.00	05/29/12	



QUALITY CONTROL

PCB Homologues by GC/MS with Soxblet Extraction - Quality Control

Analyte	Total µg Results RI		ug/m3 Results R	Spike Level L Total pg	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B052397 - SW-846 3540C										1
Blank (B052397-BLK1)				Propared: 05	i/29/12 Anal	yzed: 05/31/	12			
Menochlorobiphenyls	ND	0.0010								
Dichlorobiphenyls	ИD	0.0010								
Trichlorohiphenyls	ИD	0.0010								
Tetrachlorobiphenyls	ND	0.0020								
Pentachlorobiphenyls	ИD	0.0020								
Hexachlorobiphenyls	0.0084	0.0020								B-0
Heptachlorobiphenyls	0.0061	0.0030								
Octachlorobiphenyls	ND	0.0030								
Nonachlorobiphenyls	ND	0.0050								
Decachlorobiphenyl	ND	0.0050								
Tetal Polychlorinated biphenyls	0.015									B-0
Surrogate: Tetrachloro-m-xylene	0.204		TO MAKANE WALL	0,200		102	50-125		-	***************************************
LCS (B052397-BS1)				Prepared: 05	i/29/12 Anal	yzed; 05/31/	12			
Monochlorobiphenyls ,	0.17	0.0010		0.200		83.0	40-140			
Dichlorobiphenyls	0.18	0.0010		0.200		87.6	40~140			
l'richlorobiphenyls	0.18	0.0010		0.200		89.8	40-140			
Tetrachlorobiphenyls	0.36	0.0020		0.400		89.5	40-140			
Pentachlorobiphenyls	0.39	0.0020		0.400		97.5	40-140			
Hexachlorobiphenyls	0.39	0,0020		0.400		97.5	40-140			
Heptachlorobiphenyls	0.60	0.0030		0.600		100	40-140			
Octachlorobiphenyls	0,60	0.0030		0.600		101	40-140			
Nonachlorobiphenyls	1,1	0.0050		1.00		107	40-140			
Decachlorobiphenyl	1.1	0,0050		1.00		106	40-140			
Surrogate: Tetrachloro-m-xylene	0.194			0.200		97.1	50-125	- a de		
LCS Dup (B052397-BSD1)				Prepared: 05	5/29/12 Anal	yzed: 05/31/	32			
Monochlorobiphenyls	0.17	0.0010		0.200		84.5	40-140	1,75	50	
Dichlorobiphenyls	0.18	0.0010		0.200		89.0	40-140	1.61	50	
Trichlorobiphenyls	0.18	0.0010		0,200		91,2	40-140	1.55	50	
Tetrachlorobiphenyls	0.36	0.0020		0,400		90.5	40-140	1.07	50	
Pentachlorobiphenyls	0.40	0,0020		0.400		99.3	40-140	1.86	50	
Hexachlorobiphenyls	0.39	0.0020		0.400		98.7	40-140	1,20	50	
Heptachlorobiphenyls	0.61	0.0030		0,600		101	40-140	1.28	50	
Octachlorobiphenyls	0.61	0.0030		0.600		102	4D-140	1.01	50	
Nonachlorobiphenyls .	1,1	0.0050		1.00		108	40-140	0.940	50	
Decachlorobiphenyl	1.1	0.0050		1.00		108	40-140	2,07	50	
Surrogaie: Tetrachloro-m-xylene	0.184			0.200		92.0	50-125			
Pare. Tentremento-m-Aprene	V.104			0.200		72.0	30-123			



FLAG/QUALIFIER SUMMARY

*	QC result is outside of established limits.
t .	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound,
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
В	Analyte is found in the associated blank as well as in the sample.
B-07	Data is not affected by clevated level in blank since sample result is >10x level found in the blank.



CERTIFICATIONS

Certified Analyses included in this Report

Analyte

Certifications

TO-10A/EPA 680 Modified in Air

Total Polychlorinated biphenyls

AIHA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2012
СТ	Connecticut Department of Publile Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
ни	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2012
NC	North Carolina Div. of Water Quality	652	12/31/2012
NJ	New Jersey DEP	MA007 NELAP	06/30/2012
FL	Florida Department of Health	E871027 NELAP	06/30/2012
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2012
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Mainc	2011028	06/9/2013
VA	Commonwealth of Virginia	1381	12/14/2012

INCORRECT, TURNAROUND TIME WILL NOT STA		73.7	aract		Karnet	Received by (signature)	7	Relipquisped by: (Signature)	-	Lacoratory Comments: NANDLE ON	05 Hall of Rim 104	07 1/3 c/145000m /10	36 Hall 013 Catating	ES Hall 0/3 GHM	05/ HR11015 RM 319	03 1/3 Classion 116	od 11/5 cless room 185	PCB-Air-01 015 Beile, Ryn-H911 P	Field ID Sample Description Media	yes proposal date	Proposal Provided? (For Billing purposes)	Nicital de Offolio de Sol	Š	orient potter. Oshorna Lill School	Attention: Mr. Jason Pringle	Stratford, CT 06	Address: P.O. Box 423	Company Name: AMC Environmental, LLC	The second secon	ANALYTICAL LABORATORY	8	
INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.	5/24/12 15: 34 Approval Required	me:	2 /5.90 \(\frac{1}{24-Hr}\) -48-Hr	RUSH*	Other	10-Day		- 1	er samples 5- 7 days	- TATEZYHR	3.02 12.04 242	8:00 12:01 241	7:58 17:57 241	Ol 7:5\$ 11:55 240	7:55 11:53 240	7:51AM 11:52 241	11:48	2	Lab # Time Time	Start Stop To	Date Sampled ON	Format: DEXCEL [DATA DELIVERY (check one):	06615 Client PO#	Project #	Telephone:	1	Fax: 413-525-5405 Fax: 413-525-5405 Fax: 413-525-5405 Fax: 413-525-5405 Fax: 413-525-5405 Fax: 413-525-5405	Phone: 413-525-2332 AIR SAMPLE CH	
ONS ON YOUR CHAIN. IF			00 ng/m3	es)		ent/RCP? DY DN		Special Requirements া	Elementary School 6 - <12 yr = 300 ng/m3		2			0	0			240 54 1A 1	s M³/Min.or d L/Min.		NG PUMPS	KEY OTHER		CLIENT			REQUESTED	203-378-5020 ANALYSIS	11018	RECORD EAST LONGMEADOW, MA 01928	AIR SAMPLE CHAIN OF CUSTODY 39 SPRUCE ST	
THIS FORM IS NOT FILLED OUT COMPLETELY OR IS AIHA. NELAC & WBE/DBE Certified	O = other O = Other	N.			~	<i>x</i> 0		Matrix Code: **Media Codes;	UU ng/m3										r ' Canister e e ID	C 4		e e o romalia dina		will apply.	a a c of receipt or rental fees	, -	- 3 n	<u> </u> -	"Hg Please fill out		Page of	

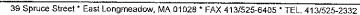
39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com





Sample Receipt Checklist

CLIENT NAME: AMC FOULCOLY	neutal	RECEIV	ED BY:	_0_	_DATE:_	5/28/12
1) Was the chain(s) of custody relinq2) Does the chain agree with the same of the sam	uished and sigi ples?	ned?		Yes No Yes No	No Co	C Included
3) Are all the samples in good condit If not, explain:	ion?			Yes No		
4) How were the samples received:						
rest	ling 🗍	Amhient		In Contar(a)		
-	_	·=	5°C)?		N/Δ	
Temperature °C by Temp blank	•				3,2	~ ℃
5) Are there Dissolved samples for th	ne lab to filter?			Ves No	\	
		Tim	e)	
6) Are there any RUSH or SHORT HO	LDING TIME sa	mnles?	~ 	Von No		
				TES NO		
7) Location where samples are stored:			Perm (Walk	-in clients only		į į
8) Do all samples have the proper Ac	id nH: Voc. N	la Rua	\			
9) Do all samples have the proper Ba	se pH: Yes N	- ()) ——		_	
1) Was the chain(s) of custody relinquished and signed? 2) Does the chain agree with the samples? If not, explain: 3) Are all the samples in good condition? If not, explain: 4) How were the samples received: On loe Direct from Sampling Ambient In Cooler(s) Were the samples received in Temperature Compliance of (2-6°C)? Yes No N/A Temperature °C by Temp blank Temperature °C by Temp gun 3.2° 5) Are there Dissolved samples for the lab to filter? Who was notified Date Time 6) Are there any RUSH or SHORT HOLDING TIME samples? Who was notified Date Time Permission to subcontract samples? Yes No						
·		Serveu	at Ct	Jii- rest		
	of containers					# of containers
				····		
					<u> </u>	
						
Dissolved Oxygen bottle	· · · · · · · · · · · · · · · · · · ·					Acs.
Encore			T			
Flashpoint bottle					er	
Perchlorate Kit		10 M			-	
Other		7 1 6 A				
Laboratory Comments:						
40 mL vials: # HCI	# Met	hanol			Time and	d Date Frozen:
Doc# 277 # Bisulfate	# DI V	Vater				
Rev. 2 Sept 2011 # Thiosulfate		served				Page 10 of 10





June 5, 2012

Jason Pringle AMC Environmental, LLC PO Box 423 Stratford, CT 06615

Project Location: Osborne Hill School

Client Job Number: Project Number: [none]

Laboratory Work Order Number: 12E1019

Enclosed are results of analyses for samples received by the laboratory on May 29, 2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely, Mattheyta

Lisa A. Worthington Project Manager



AMC Environmental, LLC PO Box 423 Stratford, CT 06615 ATTN: Jason Pringle

REPORT DATE: 6/5/2012

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

[none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER: 12E1019

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Osborne Hill School

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB
PCB-Air-01	12E1019-01	Air	Boiler Rm-Hall	TO-10A/EPA 680	
PCB-Air-02	1051010.00	4.4	30.00	Modified	
PCB-AIF-02	12E1019-02	Air	l/S Classroom 125	TO-10A/EPA 680 Modified	
PCB-Air-03	12E1019-03	Air	I/S Classroom 116	TO-10A/EPA 680	
			no classicom IIo	Modified	
PCB-Air-04	12E1019-04	Air	Hall O/S RM 119	TO-10A/EPA 680	
				Modified	
PCB-Air-06	12E1019-05	Air	Hall O/S Cafeteria	TO-10A/EPA 680	
				Modified	
PCB-Air-07	12E1019-06	Air	VS Classroom 110	TO-10A/EPA 680	
				Modified	
PCB-Air-08	12E1019-07	Air	Hall O/S Rm 104	TO-10A/EPA 680	
				Modified	



CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

TO-10A/EPA 680 Modified

Qualifications:

Analyte is found in the associated blank as well as in the sample.

Analyte & Samples(s) Qualified:

Heptachlorobiphenyls, Hexachlorobiphenyls, Total Polychlorinated biphenyls

12E1019-01[PCB-Air-01], 12E1019-02[PCB-Air-02], 12E1019-03[PCB-Air-03], 12E1019-04[PCB-Air-04], 12E1019-07[PCB-Air-08], B052397-BS1, B052397-BSD1, 12E1019-05[PCB-Air-06], 12E1019-06[PCB-Air-07]

Data is not affected by elevated level in blank since sample result is >10x level found in the blank.

Analyte & Samples(s) Qualified:

Hexachlorobiphenyls, Total Polychlorinated biphenyls

B052397-BLK1, 12E1019-01[PCB-Air-01], 12E1019-02[PCB-Air-02], 12E1019-04[PCB-Air-04], 12E1019-05[PCB-Air-06], 12E1019-06[PCB-Air-07], 12E1019-07[PCB-Air-08]

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damhoragian Laboratory Manager



ANALYTICAL RESULTS

Project Location: Osborne Hill School

Date Received: 5/29/2012

Field Sample #: PCB-Air-01 Sample ID: 12E1019-01 Sample Matrix: Air

Sample Matrix: Air Sampled: 5/26/2012 11:46 Sample Description/Location: Boiler Rm-Hall

Sub Description/Location:

Flow Controller ID: Sample Type:

Air Volume L: 1200

TO-10A/EPA 680 Modified

	Tetr	Total µg		υg	m3	Date/Time		
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analys
Monochlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 2:19	СЈМ
Dichlorobiphenyls	аи	0.0010		ND	0.00083	l	6/1/12 2:19	CJM
Trichlorobiphenyls	ДИ	0.0010		ND	0.00083	1	6/1/12 2:19	CJM
Tetrachlorobiphenyls	0,089	0.0020		0.074	0.0017	1	6/1/12 2:19	CJM
Pentachlorobiphenyls	0.21	0,0020		81.0	0.0017	1	6/1/12 2:19	CJM
Hexachlorobiphenyls ·	0.055	0.0020	В	0.046	0.0017	1	6/1/12 2:19	CJM
Heptachlorobiphenyls	0.0061	0.0030	В	0.0051	0.0025	1	6/1/12 2:19	CIM
Octachlorobiphenyls	ND	0.0030		ND	0,0025	1	6/1/12 2:19	СЈМ
Nonachlorobiphenyls	ND	0.0050		ND	0.0042	1	6/1/12 2:19	CJM
Decachlorobiphenyi	ND	0.0050		ND	0.0042	i	6/1/12 2:19	СЈМ
Total Polychlorinated biphenyls	0.36		B-07, B	0.30		1	6/1/12 2:19	CJM

Tetrachloro-m-xylene 86.3 50-125 6/1/12 2:19

Work Order: 12E1019



ANALYTICAL RESULTS

Project Location: Osborne Hill School

Date Received: 5/29/2012

Field Sample #: PCB-Air-02 Sample ID: 12E1019-02

Sample Matrix: Air Sampled: 5/26/2012 11:48 Sample Description/Location: I/S Classroom 125

Sub Description/Location:

Flow Controller ID: Sample Type:

Air Volume L: 1200

Work Order: 12E1019

TO-10A/EPA 680 Modified

	Tota	a) hg		ug/m3			Date/Time		
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst	
Monochlorobiphenyls	ND	0100.0		ND	0,00083	1	6/1/12 2:53	СІМ	
Dichlorobiphenyls	ND	0100,0		ND	0,00083	I	6/1/12 2:53	CJM	
Trichlorobiphenyls	. ND	0.0010		ND	0.00083	I	6/1/12 2:53	CJM	
l'etrachlorobiphenyls	0.077	0.0020		0.064	0,0017	1	6/1/12 2:53	CJM	
Pentachlorohiphenyls	0.17	0.0020		0.14	0.0017	1	6/1/12 2:53	CJM	
Hexachlorobiphenyls	0,042	0.0020	В	0.035	0.0017	1	6/1/12 2:53	CJM	
Heptachlorobiphenyls	0.0051	0,0030	В	0.0042	0.0025	1	6/1/12 2:53	СЈМ	
Octachlorobiphenyls	ND	0.0030		ND	0.0025	1	6/1/12 2:53	СЈМ	
Nonachiorobiphenyls	ND	0.0050		ND	0.0042	1	6/1/12 2:53	СЈМ	
Decachlorobiphenyl	ND	0.0050		ND	0.0042	1	6/1/12 2:53	CJM	
Total Polychforinated biphenyls	0.29		B-07, B	0.24		1	6/1/12 2:53	СЈМ	

Surrogates	% Recovery	% REC Limits	
Tetrachloro-m-xylcne	90.5	50-125	6/1/12 2:53



ANALYTICAL RESULTS

Project Location: Osborne Hill School

Date Received: 5/29/2012 Field Sample #; PCB-Air-03 Sample Description/Location: I/S Classroom 116 Sub Description/Location:

Work Order: 12E1019

Field Sample #: PCB-Air Sample ID: 12E1019-03

Sample Matrix: Air Sampled: 5/26/2012 11:52 Flow Controller ID; Sample Type; Air Volume L; 1205

TO-10A/EPA 680 Modified

•		TO-TOWER OUR BROKENED						
	Tota	al µg	ug/m3			Date/Time		
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analys
Monochlorobiphenyls	ON	0.0010		ND	0.00083	1	6/1/12 3:27	СЛМ
Dichlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 3:27	СЈМ
Trichlorobiphenyls	ND	0.0010		ND	0,00083	1	6/1/12 3:27	CJM
Tetrachlorobiphenyls	0,031	0.0020		0,025	0.0017	i	6/1/12 3:27	СЈМ
Pentachiorobiphenyis	0.067	0.0020		0.055	0.0017	i	6/1/12 3:27	CJM
Hexachlorobiphenyls	0.020	0.0020	В	0.016	0.0017	1	6/1/12 3:27	CJM
leptachlorobiphenyls	0.0048	0.0030	В	0.004	0.0025	. 1	6/1/12 3;27	CIM
Octachlorobiphenyls	ND	0.0030		ND	0.0025	1	6/1/12 3:27	CJM
Vonachiorobiphenyls	ND	0.0050		ND	0.0041	j	6/1/12 3:27	СЛМ
Decachlorobiphenyl	סא	0.0050		ND	0.0041	i	6/1/12 3:27	СЈМ
Fotal Polychlorinated biphenyls	0.12		В	0.10		I	6/1/12 3:27	СЈМ
Surrogates	% Reco	very		% RE	C Limits			
Fetrachloro-ın-xylene		85.9		50	1-125		6/1/12 3:27	



ANALYTICAL RESULTS

Project Location: Osborne Hill School

Date Received: 5/29/2012 Field Sample #: PCB-Air-04

Sample ID: 12E1019-04 Sample Matrix: Air Sampled: 5/26/2012 11:53 Sample Description/Location: Hall O/S RM 119

Sub Description/Location:

Flow Controller ID; Sample Type:

Air Volume L: 1200

Work Order: 12E1019

TO-10A/EPA 680 Modified

	Tota	Total µg		ug/	m3		Date/Time		
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst	
Monochlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 4:01	СЈМ	
Dichlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 4:01	СЈМ	
Trichlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 4:01	CJM	
Tetrachlorobiphenyls	0.11	0,0020		0.091	0.0017	1	6/1/12 4:01	CJM	
Pentachlorobiphenyls	0.25	0,0020		0.21	0.0017	1	6/1/12 4:01	СЈМ	
Hexachlorobiphenyls	0.065	0.0020	В	0.054	0.0017	1	6/1/12 4:01	СЈМ	
Heptachlorobiphenyls	0,0077	0,0030	В	0.0064	0.0025	1	6/1/12 4:01	CJM	
Octachlorobiphenyls	ND	0.0030		ND	0.0025	1	6/1/12 4:01	CJM	
Nonachlorobiphenyls	ND	0.0050		ND	0.0042	1	6/1/12 4:01	CJM	
Decachlorobiphenyl ·	ND	0.0050		ИD	0.0042	1	6/1/12 4:01	СЈМ	
Total Polychlorinated biphenyls	0,44		B-07, B	0.36		1	6/1/12 4:01	СЈМ	

 Sumogates
 % Recovery
 % REC Limits

 Tetrachloro-m-xylene
 88.5
 50-125
 6/1/12 4:01



ANALYTICAL RESULTS

Project Location: Osborne Hill School

Date Received: 5/29/2012

Field Sample #; PCB-Air-06
Sample ID: 12E1019-05

Sample Matrix: Air Sampled: 5/26/2012 11:57 Sample Description/Location: Hall O/S Cafeteria

Sub Description/Location:

Flow Controller ID: Sample Type: Air Volume L: 1205 Work Order: (2E1019

TO-10A/EPA 680 Modified

	Tota	Total µg		ug/	m3		Date/Time		
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst	
Monochlorobiphenyls	ND	0.0010		ND	0,00083	1	6/1/12 4:35	CJM	
Dichlorobiphenyls	ďИ	0.0010		ИD	0,00083	J	6/1/12 4:35	CJM	
Frichlorobiphenyls	ND	0.0010		ND	0.00083	ι	6/1/12 4:35	СЈМ	
l'etrachlorobiphenyts	0.12	0.0020		0.099	0.0017	1	6/1/12 4:35	СЈМ	
Pentachlorobiphenyls	0.30	0.0020		0.25	0.0017	1	6/1/12 4:35	СЈМ	
lexachlorobiphenyls	0.073	0.0020	В	0.061	0.0017	ſ	6/1/12 4:35	CJM	
Teptachlorobiphenyls	ND	0.0030		ND	0.0025	ſ	6/1/12 4:35	СЛМ	
Octachlorobiphenyls	ND	0.0030		ND	0.0025	ļ	6/1/12 4:35	CJM	
Nonachlorobiphenyls	מא	0.0050		ND	0.0041	3	6/1/12 4:35	СЈМ	
Decachlorobiphenyl	ND	0.0050		ND	0.0041	1	6/1/12 4:35	CJM	
Total Polychlorinated biphenyls	0.49		B-07, B	0.41		1	6/1/12 4:35	СЈМ	

Surrogates	% Recovery	% REC Limits	
Tetrachloro-m-xylene	92.2	50-125	6/1/12 4:35



ANALYTICAL RESULTS

Project Location; Osborne Hill School

Date Received: 5/29/2012 Field Sample #: PCB-Air-07

Sample Description/Location: I/S Classroom 110 Sub Description/Location:

Work Order: 12E1019

Sample ID: 12E1019-06 Sample Matrix; Air

Flow Controller ID: Sampled: 5/26/2012 12:01 Sample Type: Air Volume L: 1205

TO-10A/EPA 680 Modified

	Tota	ıIμg		ug/m3			Date/l'ime		
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analyst	
Monochlorobiphenyls	ND	0.0010		ND	0.00083	t	6/1/12 5:09	СЛМ	
Dichlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 5:09	СЈМ	
Trichlorobiphenyls	ND	0.0010		ND	0.00083	1	6/1/12 5:09	СІМ	
Tetrachlorobiphenyls	0.062	0.0020		0.051	0.0017	1	6/1/12 5:09	CJM	
Pentachlorobiphenyls	0.12	0.0020		0.097	0.0017	1	6/1/12 5:09	CJM	
Hexachlorobiphenyls	0.024	0.0020	В	0.020	0.0017	1	6/1/12 5:09	CJM	
Heptachlorobiphenyls	ND	0.0030		ND	0.0025	1	6/1/12 5:09	CJM	
Octachlorobiphenyls	ND	0,0030		ND	0.0025	1	6/1/12 5:09	СЭМ	
Nonachlorobiphenyls	ND	0.0050		ND	0.004 J	Í	6/1/12 5:09	CJM	
Decachlorobiphenyl	ND	0.0050		ND	0.0041	1	6/1/12 5:09	СЈМ	
Total Polychlorinated biphenyls	0,20		B-07, B	0.17		1	6/1/12 5:09	CJM	

Total Polychlorinated biphenyls	0,20	B-07, B	0.17	1	6/1/12 5:09	CJM
Surrogates	% Recovery		% REC Limits			
Tetrachloro-m-xylene	87.1		50-125		6/1/12 5:09	



ANALYTICAL RESULTS

Work Order: 12E1019

Project Location: Osborne Hill School

Date Received: 5/29/2012

Field Sample #: PCB-Air-08 Sample ID: 12E1019-07

Sample Matrix; Air Sampled: 5/26/2012 12:04 Sample Description/Location: Hall O/S Rm 104

Sub Description/Location:

Flow Controller ID:

Sample Type: Air Volume L: 1210

TO-10A/EPA 680 Modified

	Tota	ц	ug/m3			Date/Time	Date/Time		
Analyte	Results	RL.	Flag	Results	RL	Dilution Analyzed Anal	lysi		
Monochlorobiphenyls	ND	0.0010		ND	0.00083	1 6/1/12 5:43 CD	м		
Dichlorobiphenyls	ND	0.0010		ND	0.00083	1 6/L/12 5:43 CJI			
Trichlorobiphenyls	ND	0.0010		ND	0.00083	1 6/1/12 5:43 CJ)	М		
Tetrachlorobiphonyls	0.059	0.0020		0.049	0.0017	I 6/1/12 5:43 CJI	M		
Pentachlorobiphenyls	0.13	0.0020		0.11	0.0017	1 6/1/12 5:43 CJ	М		
Hexachlorobiphenyls	0.040	0.0020	В	0.033	0.0017	I 6/1/12 5:43 CJI	M		
Heptachlorobiphenyls	0.0079	0.0030	В	0.0065	0.0025	1 6/1/12 5:43 CJI	М		
Octachlorobiphenyls	ND	0.0030		ND	0.0025	I 6/1/12 5:43 CJ	M		
Nonachlorobiphenyls	ND	0,0050		ND	0.0041	I 6/1/12 5:43 CJ)	M		
Decachlorobiphenyl	ND	0.0050		ND	0.0041	I 6/1/12 5:43 CJN	M		
Total Polychlorinated biphenyls	0.24		B-07, B	0,20		1 6/1/12 5:43 CJ	M		

Surrogates % Recovery % REC Limits

Tetrachloro-m-xylene 84.4 50-125 6/1/12 5:43



Sample Extraction Data

Prep Method: SW-846 3540C-TO-10A/EPA 680 Modified

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date	
12E1019-01 [PCB-Air-01]	B052397	1.00	1,00	05/29/12	
12E1019-02 [PCB-Air-02]	B052397	1.00	1,00	05/29/12	
12E1019-03 [PCB-Air-03]	B052397	1.00	1.00	05/29/12	
12E1019-04 [PCB-Air-04]	B052397	1,00	1.00	05/29/12	
12E1019-05 [PCB-Air-06]	B052397	1.00	1.00	05/29/12	
12E1019-06 [PCB-Air-07]	B052397	1.00	1.00	05/29/12	
12E1019-07 [PCB-Air-08]	В052397	1.00	1,00	05/29/12	



QUALITY CONTROL

PCB Homologues by GC/MS with Soxhlet Extraction - Quality Control

Analyte	Tota Results	al µg RL	ng/m3 Results	RL	Spike Level Total µg	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B052397 - SW-846 3540C										***************************************	
Blank (B052397-BLK1)	,,=				Prepared; 05/	/29/12 Analy	yzed: 05/31/	12			_
Monochlorobiphenyls	ND	0.0010				,					
Dichlorobiphenyls	ИD	0,0010									
Trichtorobiphenyls .	ND	0.0010									
Tetrachlorobiphenyls	ND	0.0020									
Pentachlorobiphenyls	ND	0.0020									
Hexachlorobiphenyls	0.0084	0.0020									B-(
Heptachlorobiphenyls	0.0061	0.0030									
Octachlorobiphenyls	ND	0.0030									
Nonachlorobiphenyls	ИD	0.0050									
Decachlorobipheny1	ИD	0.0050									
Total Polychlorinated biphenyls	0.015										В-6
Surrogate: Tetrachloro-m-xylene	0.204		<u></u>		0.200	·	102	50-125	manna.		
LCS (B052397-BS1)					Prepared: 05/	/29/12 Analy	yzed; 05/31/3	12			
Monechlorobiphenyis	0.17	0.0010			0,200		83.0	40-140	·		
Dichlorobiphenyls	0.18	0.0010			0.200		87.6	40-140			
Trichlorobiphenyls	0.18	0.0010			0.200		89.8	40-140			
Tetrachlorobiphenyls	0,36	0,0020			0.400		89,5	40-140			
Pentachlorobiphenyls	0.39	0.0020			0,400		97.5	40-140			
Hexachlorobiphenyls	0.39	0.0020			0,400		97.5	40-140			
Heptachlorobiphenyls	0,60	0.0030			0.600		100	40-140			
Octachlorobiphenyls	0.60	0,0030			0.600		101	40-140			
Nonachlorobiphenyls	1.1	0.0050			1.00		107	40-140			
Decachlorobiphenyl .	1.1	0.0050			1,00		106	40-140			
Surrogate: Tetrachloro-m-xylene	0.194				0.200		97.1	50-125			
LCS Dup (B052397-BSD1)					Prepared; 05	/29/12 Analy	yzed: 05/31/	12			
Monochlorobiphenyls	0,17	0.0010			0.200		84.5	40-140	1.75	50	
Dichlorobiphenyls	0.18	0.0010			0.200		89.0	40-140	1,61	50	
Trichlorobiphenyls	0.18	0.0010			0.200		91.2	40-140	1,55	50	
Tetrachlorobiphenyls	0,36	0.0020			0.400		90.5	40-140	1.07	50	
Pentachlorobiphenyls	0.40	0.0020			0.400		99.3	40-140	1,86	50	
Hexachlorobiphenyls	0.39	0,0020			0.400		98.7	40-140	1.20	50	
Heptachlorobiphenyls	0.61	0.0030			0.600		101	40-140	1.28	50	
Octachlorobiphenyls	0,61	0.0030			0.600		102	40-146	1.01	50	
Nonachlorobíphenyls	1.1	0.0050			1.00		108	40-140	0.940	50	
Decachlorohiphenyl	1.1	0.0050			1.00		108	40-140	2.07	50	
Surrogate: Tetrachloro-m-xylene	0.184	•••			0.200		92.0	50-125			



FLAG/QUALIFIER SUMMARY

* .	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound.
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
В	Analyte is found in the associated blank as well as in the sample.
B-07	Data is not affected by elevated level in blank since sample result is >10x level found in the blank,



CERTIFICATIONS

Certified Analyses included in this Report

.....

Certifications

TO-10A/EPA 680 Modified in Air

Total Polychlorinated biphenyls

AIHA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
Alha	AIHA-LAP, LLC	100033	62/1/2014
МΛ	Massachusetts DEP	M-MA100	06/30/2012
CT	Connecticut Department of Publile Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2012
NC	North Carolina Div. of Water Quality	652	12/31/2012
NJ	New Jersey DEP	MA007 NELAP	06/30/2012
FL	Florida Department of Health	E871027 NELAP	06/30/2012
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2012
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	1381	12/14/2012

Ō	CONTRACTOR OF THE PERSON NAMED IN COLUMN 1
ğ	
any	
Company Name	1
ņe:	>
≱	
AMC	CON-LÉST
<u>m</u>	ć I
Environmenta	e e
일	
ne	Ž e
nta	8
c	10 T TI

Rev. July Please fill Completely L and retain L and retain L and retain Completely L and retain R flow contro R flow cont	ERED BY OUR CLIENT.	O = other	by (signature) 7 7 1 Date Time: D-72-Hr D-*4-Day Other: BL = BLANK	5/37/13 /5.30 Et 24-Hr -48-Hr Required Detection Limits: 300 ng/m3 D = DUP	N. Nonature) Date Time: RUSH • (Surchage Applies) SS = SUB SLAB	AMB=AMBIENT S/R9//3 11/55 Other Enhanced Data Package Y N AMB=AMBIENT	☐ 10-Day Data Enhancement/RCP? ☐Y ☐N IA= INDOOR AIR	SG=SOIL GAS	Turnaround ** Special Requirements *Matrix Code:	SAMPLE OS - 14124775 Elementary School 6 - <12 yr = 300 ng/m3	Comments:	 90 01 mag		04) HR 11 013 RM 119 104 7:53 11:53 240	116 03	02 1/3 class room 125 02 51248 At 11:48 240	PCB-Air-01 015 Boile, By- Hall P 01 7:46Am 11:46 240 5c 1A	Media Lab # Time Time Sampled L/Min. M3 Code* GO e	art Stop Total Flow Rate Volume	0 5 4	 Fax #:	DATA DELIVERY (check one); DFAX DEMAIL DWEBSITE CLIENT	015		y Name: AIMC Environmental	www.contestlabs.com	Fax: 413-525-6405
	AIHA, NELAC & WBE/DBE Certified	O = other					~											+			 70	a		<u> </u>			Rev.Jul

INCORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com





Sample Receipt Checklist

CLIENT NAME: AMC FOULCO	moutal RECEIVED BY:	DATE	5/28/12
1) Was the chain(s) of custody reline 2) Does the chain agree with the sar If not, explain:	nples?	Yes No No C	oC Included
3) Are all the samples in good condi If not, explain:	tion?	Yes No	
4) How were the samples received:			
On Ice Direct from Same	oling Ambient	In Cooler(s)	
Were the samples received in Temp	_	Yes No N/A	
Temperature °C by Temp blank	Temperature °C b		2 °C
5) Are there Dissolved samples for t	he lab to filter?	Yes (No	
	Date Time	100 (10)	
6) Are there any RUSH or SHORT HO		Yes No	
Who was notified		(ies) NO	
7) Location where samples are stored:	Permi	ssion to subcontract s	
		Signature:	
8) Do all samples have the proper A	~ \		
9) Do all samples have the proper B	\		
and the proper B			
Con	tainers received at Co	n-Test	
	# of containers		# of containers
1 Liter Amber	8 oz a	amber/clear jar	
500 mL Amber	4 oz a	amber/clear jar	
250 mL Amber (8oz amber)	2 oz a	amber/clear jar	
1 Liter Plastic	Ai	ir Cassette	
500 mL Plastic	Hg/H	lopcalite Tube	
250 mL plastic	Plast	ic Bag / Ziploc	
40 mL Vial - type listed below		2.5 / PM 10	
Colisure / bacteria bottle	PU	IF Cartridge	Xus. 7
Dissolved Oxygen bottle		SOC Kit	
F			· · · · · · · · · · · · · · · · · · ·
Encore Closhadia hall	TO	O-17 Tubes	
Flashpoint bottle	TO Non-Co	D-17 Tubes onTest Container	
Flashpoint bottle Perchlorate Kit	TC Non-Co	D-17 Tubes nTest Container ner glass jar	
Flashpoint bottle	TO Non-Co	D-17 Tubes onTest Container	
Flashpoint bottle Perchlorate Kit Other	TO Non-Co Oth	D-17 Tubes onTest Container ner glass jar Other	nd Date Frozen:
Flashpoint bottle Perchlorate Kit Other Laboratory Comments:		D-17 Tubes onTest Container ner glass jar Other	nd Date Frozen:



June 7, 2012

Sandy Owen AMC Environmental, LLC PO Box 423 Stratford, CT 06615

Project Location: Osbourne Hill School

Client Job Number: Project Number: [none]

Laboratory Work Order Number: 12F0069

Lua Warrengton

Enclosed are results of analyses for samples received by the laboratory on June 4, 2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington Project Manager



AMC Environmental, LLC PO Box 423 Stratford, CT 06615

ATTN: Sandy Owen

REPORT DATE: 6/7/2012

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

foonel

ANALYTICAL SUMMARY

WORK ORDER NUMBER:

12F0069

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report.

PROJECT LOCATION:

Osbourne Hill School

FIELD SAMPLE #

LAB ID: MATRIX

RIX

SAMPLE DESCRIPTION

TEST

SUB LAB

PCB-Air-01

12F0069-01

Air

Hall O/S Gym

TO-10A/EPA 680 Modified

Page 2 of 10



CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

TO-10A/EPA 680 Modified

Qualifications:

Continuing calibration did not meet method specifications and was biased on the high side. Date validation is not affected since sample result was "not detected" for this compound.

Analyte & Samples(s) Qualified:

Decachlorohiphenyi

12F0069-01[PCB-Air-01], B052815-BLK1, B052815-BS1, B052815-BSD1

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian Laboratory Manager



ANALYTICAL RESULTS

Project Location: Osbourne Hill School

Date Received: 6/4/2012 Field Sample #: PCB-Air-01 Sample Description/Location: Hall O/S Gym Sub Description/Location:

Work Order: 12F0069

Sample ID: 12F0069-01

Sample Matrix: Air Sampled: 6/2/2012 13:35

Flow Controller ID: Sample Type:

Air Volume L: 1240

TO-10A/EPA 680 Modified

•	Tota	al µg		uga	/m3		Date/Time			
Analyte	Results	RL	Flag	Results	RL	Dilution	Analyzed	Analysi		
Monochlorobiphenyls	ND	0.0010		ND	0.00081	1	6/7/12 14:15	СЈМ		
Dichlorobiphenyls	מא	0.0010		ND	0,00081	1	6/7/12 14:15	CJM		
Trichlerobiphenyls	ND	0.0010		ND	18000,0	1	6/7/12 14:15	CJM		
Tetrachlerobiphenyls	0.0025	0.0020		0,002	0.0016	1	6/7/12 14:15	СЛМ		
Pentachlorobiphenyls	0.10	0.0020		0.083	0.0016	1	6/7/12 14:15	СЈМ		
Hexachlorobiphenyls	0.25	0.0020		0.20	0.0016	l	6/7/12 14:15	СЈМ		
Heptachlorobiphenyls	0.062	0.0030		0.050	0.0024	1	6/7/12 14:15	CJM		
Octachlorobiphenyls	ND	0,0030		ND	0.0024	1	6/7/12 14:15	CJM		
Nonachlorobiphcoyls	ND	0.0050		ND	6.004	1	6/7/12 14:15	CJM		
Decachlorobiphenyl	ИN	0.0050	V-20	ND	0.004	1	6/7/12 14:15	СЈМ		
Total Polychlorinated biphenyls	0.42			0.34		1	6/7/12 14:15	CJM		

Surrogates % Recovery % REC Limits Tetrachloro-m-xylene 73.2 50-125 6/7/12 14:15



Sample Extraction Data

Prep Method: SW-846 3540C-TO-10A/EPA 680 Modified

Lab Number [Field ID]	Batch	Initial [Cartridge	Final [mL]	Date	
12F0069-01 [PCB-Air-01]	B052815	1,00	1,00	06/05/12	



QUALITY CONTROL

PCB Homologues by GC/MS with Soxblet Extraction - Quality Control

Analyte	Tota Results	il μg RL	ug/m3 Results RL	Spike Level Total µg	Source Result	%REC	%REC Limits	RPD	RPD Limit	Flag
Batch B052815 - SW-846 3540C										
Blank (B052815-BLK1)				Prepared: 06	/05/12 Anal	yzed; 06/07/	12			
Monochlorobiphenyls	ND	0,0016				-				***
Dichlorobiphenyls	ND	0.0010								
Trichlorobiphenyls	ND	0.0010								
Tetrachlorobiphonyls	ND	0.0020								
Pentachlorobiphenyls	ND	0.0020								
Hexachlorobiphenyls	ND	0.0020								
Heptachlorobiphenyls	ND	0.0030								
Octachlorobiphenyls	ND	0,0030								
Nonachlorobiphenyls	ND	0.0050								
Decachlorobiphenyl	ND	0.0050								V-2
Total Polychlorinated biphenyls	0.0									
Surrogate: Tetrachloro-m-xylene	0.153			0.200		76.3	50-125			
LCS (B052815-BS1)				Prepared: 06	/05/12 Anal	yzed; 06/07/	12			
Monochlorobiphenyls	0,14	0,0010		0.200		71,3	40-140			
Dichlorobiphenyls	0.16	0.0010		0,200		78.2	40-140			
Trichlorobiphenyls	0,16	0.0010		0.200		80.1	40-140			
Tetrachlorobiphenyls	0.32	0,0020		0.400		80.7	40-140			
Pentachlorobiphenyls	0.36	0,0020		0.400		90.0	40-140			
Hexachlorobiphenyls	0.36	0.0020		0.400		90.8	40-140			
Heptachlorobiphenyls	0.54	0.0030		0.600		89,5	40-140			
Octachlorobiphenyls	0.51	0.0030		0.600		85,6	40-140			
Nonachlorobiphenyls	1.1	0.0050		1.00		107	40-140			
Decachlorobiphenyl	1.3	0.0050		1,00		132	40-140			V-2
Surrogate: Tetrachloro-m-xylene	0.185			0.200		92.#	50-125			
LCS Dup (B052815-BSD1)				Prepared; 06	i/05/12 Anal	yzed: 06/07/	'12			
Monochlorobiphenyls	0.14	0.0010		0.200		70.0	40-140	1.81	50	
Dichlorobiphenyls	0.15	0.0010		0.200		76.3	40-140	2,46	50	
Trichlorobiphenyls	0.16	0.0010		0,200		77.6	40-140	3.14	50	
Tetrachlorobiphenyls	0.31	0.0020		0.400		78.5	40-140	2.71	50	
Pentachlorobiphenyls	0,35	0.0020		0.400		88.5	40-140	1.66	50	
Hexachlorobiphenyls	0.36	0.0020		0.400		89,2	40-140	1.81	50	
Heptachlorobiphenyls	0.53	0.0030		0,600		88.1	40-140	1,58	50	
Octachlorobiphenyls	0.51	0.0030		0,600		85.3	40-140	0.431	50	
Nonachlorobiphenyls	1.1	0.0050		1.00		107	40-140	0.758	50	
Decachlorobiphenyl	1.3	0.0050		1.00		132	40-140	0.427	50	V-
Surrogate: Tetrachloro-m-xylene	0.163			0.200		81.3	50-125			



FLAG/QUALIFIER SUMMARY

* .	QC result is outside of established limits.
†	Wide recovery limits established for difficult compound.
‡	Wide RPD limits established for difficult compound,
#	Data exceeded client recommended or regulatory level
	Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.
V-20	Continuing calibration did not meet method specifications and was biased on the high side. Data validation is not affected since sample result was "not detected" for this compound.



CERTIFICATIONS

Certified Analyses included in this Report

Analyte

Certifications

TO-10A/EPA 680 Modified in Air

Total Polychlorinated hiphenyls

AHA

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2012
СТ	Connecticut Department of Publile Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2012
NC	North Carolina Div. of Water Quality	652	12/31/2012
NJ	New Jersey DEP	MA007 NELAP	06/30/2012
FL	Florida Department of Health	E871027 NELAP	06/30/2012
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2012
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	1381	12/14/2012

NOORRECT, TURNAROUND TIME WILL NOT START UNTIL ALL QUESTIONS ARE ANSWERED BY OUR CLIENT.	21/1/10	Reserve 11 poly (signature) 4/1 C Date Time: 1700	12/1/2 /b//n 40°	te/Time:	_4	Received by Toky hature	10/10/1/	Relinquished by (signature)		Laboratory Comments:	PCB-hir-b8 P	AGBAIr-67	PC3-M-06	PCB-301-05	P(1844) 04	POMP-03	PCB-Air-92	PCB-AIR-01 Hall O/S GYM P - 01	Field ID Sample Description Media Lab#	yes proposal date	Proposal Provided? (For Billing purposes)	Sampled By: Richard Onofrio/Jason Pringle	Project Location: Osborne Hill School	Attention: Mr. Jason Pringle	Stratford, CT 06615	Address: P.O. Box 423	Company Name: AMC Environmental, LLC	TORY	Phone: 413-525-2332
LE RECEIPT UNLESS THERE A ISTIONS ARE ANSWERED BY C	*Approval Required		‡	RUSH *	Other	10-Day		Turnaround **										9:27 1:35 248	Date Time		Format: DEXCEL ZPDF Date Sampled ONLY	Email: results@amcenviro.com	Fax#	DATA DELIVERY (check one):	Client PO#	Project #	Telephone: (2		132
ARE QUESTIONS ON YOUR CH OUR CLIENT.			Required Detection Limits: 300 ng/m3		<u> </u>	nent/RCP? □Y	Regulations; CT	Special Requiremen	Elementary School 6 - <12 yr = 300 ng/m3	CLIENT COMMENTS;							•	135 L/M 12	s M³/Min. or ed L / Min.	Total Flow Rate Volume	ZIPDF ☐GIS KEY ☐OTHER	0.com		K one):			203) 378-5020	JF 0169	AIR SAMPLE CHAIN OF CUSTODY
IF THIS FORM IS						IA NOOOR AIR		nents "Matrix Code:	12 yr = 300 ng/m3										Matrix Code*		omo	log				REQUESTED	ANALYSIS	EAST LONGMEADOW, MA 01028	39 SPRUCE ST
IF THIS FORM IS NOT FILLED OUT COMPLETELY OR IS AJHA, NELAC & WBE/DBE Certified	O = Other							e: **Media Codes:											Canister	s s s Summa Flow	Ø @	r retained for a minimum	Summa canisters will be	a a c of receipt or rental fees		n a copy for your record.	completely, sign, date	R _e	Page of DOC#284

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com



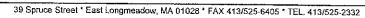


Sample Receipt Checklist

CLIENT NAME: AMC ENVIR	onmental	RECEIVED BY:	,	6/4/12
1) Was the chain(s) of custody relia	nquished and sign	ed?	(Yes) No No	CoC Included
2) Does the chain agree with the salif not, explain:	amples?		Yes No	Joo maraga
3) Are all the samples in good cond if not, explain:	dition?		Wes No	
4) How were the samples received: On Ice Direct from Sam		A		
Were the samples received in Tem	, 1 Table 1	Ambient	In Cooler(s)	
Temperature °C by Temp blank		Temperature °C b	Yes No N/A y Temp gun	1°C
5) Are there Dissolved samples for	the lab to filter?		Yes (No)	
Who was notified	Date	Time		
6) Are there any RUSH or SHORT H	IOLDING TIME sat	nples?	Yes (No)	
Who was notified				
7) Location where samples are stored:	19	(Walk	ssion to subcontract: -in clients only) if not Signature:	1
8) Do all samples have the proper A	Acid pH: Yes No	\wedge		
9) Do all samples have the proper I	-			
у порег	Base pH: Yes N		Andrew Control	Marine Service and the service of th
Col	ntainers rec			
	# of containers			# of containers
1 Liter Amber		DA 3504	amber/clear jar	# Of Containers
500 mL Amber		4 oz a	amber/clear jar	
250 mL Amber (8oz amber)		3.863	amber/clear jar	
1 Liter Plastic		Rest 1885	ir Cassette	
500 mL Plastic		1.1 (1.5)	opcalite Tube	
250 mL plastic		11.31.79.88	ic Bag / Ziploc	
40 mL Vial - type listed below		8 29 3	2.5 / PM 10	
Colisure / bacteria bottle		(A) (B) (B)	F Cartridge	
Dissolved Oxygen bottle		17 20 62	SOC Kit	
Encore		15/4/ 5/ 5 1	D-17 Tubes	
Flashpoint bottle		Non Co	nTest Container	
Perchlorate Kit		1.00.00	ner glass jar	
Other			Other	
Laboratory Comments:		Ministration of the Control of the C		
40 mL vials: # HCl	# Meth	nanol	Time	and Date Frozen:
Doc# 277 # Bisulfate	# DI W	/ater		
		served		Page 10 of

Osborne Hill School June 12, 2012 Page 9 of 9

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





June 5, 2012

Jason Pringle AMC Environmental, LLC PO Box 423 Stratford, CT 06615

Project Location: Osborne Hill School

Client Job Number: Project Number: [none]

Laboratory Work Order Number: 12E1021

Lua Warrengton

Enclosed are results of analyses for samples received by the laboratory on May 29, 2012. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa A. Worthington Project Manager



AMC Environmental, LLC PO Box 423

REPORT DATE: 6/5/2012

PO Box 423 Stratford, CT 06615 ATTN: Jason Pringle

PURCHASE ORDER NUMBER:

PROJECT NUMBER:

[none]

ANALYTICAL SUMMARY

WORK ORDER NUMBER:

12E1021

The results of analyses performed on the following samples submitted to the CON-TEST Analytical Laboratory are found in this report,

PROJECT LOCATION:

Osborne Hill School

FIELD SAMPLE #	LAB ID:	MATRIX	SAMPLE DESCRIPTION	TEST	SUB LAB	
PCB-Wipe-01	[2E1021-01	Wipe	Hall Floor O/S Gym	SW-846 8082 A		
PCB-Wipe-02	12E1021-02	Wipe	Hall Floor O/S Gym	SW-846 8082A		
PCB-Wipe-03	12E1021-03	Wipe	Hall O/S Gym Wind, Sill	SW-846 8082A		
PCB-Wipe-04	12E1021-04	Wipe	Rm 116-Floor	SW-846 8082A		
PCB-Wipe-05	12E1021-05	Wipe	RM 116 Wind, Sill	SW-846 8082A		



CASE NARRATIVE SUMMARY

All reported results are within defined laboratory quality control objectives unless listed below or otherwise qualified in this report.

The results of analyses reported only relate to samples submitted to the Con-Test Analytical Laboratory for testing.

I certify that the analyses listed above, unless specifically listed as subcontracted, if any, were performed under my direction according to the approved methodologies listed in this document, and that based upon my inquiry of those individuals immediately responsible for obtaining the information, the material contained in this report is, to the best of my knowledge and belief, accurate and complete.

Daren J. Damboragian Laboratory Manager



Analyte

39 Spruce Street * East Longmeadow, MA 01028 * FAX 413/525-6405 * TEL. 413/525-2332

Project Location: Osborne Hill School

Sample Description:

Results

ND

ND

ΝD

ND

ND

3.2

ND

ND

ND

0.40

0.40

Hall Floor O/S Gym

Polychlorinated Biphenyls with 3540 Soxhlet Extraction

Work Order: 12E1021

Date Received: 5/29/2012 Field Sample #: PCB-Wipe-01

Sampled: 5/26/2012 09:30

Sample ID: 12E1021-01 Sample Matrix: Wipe

Aroclor-1016 [1]

Aroclor-1221 [1]

Aroclor-1232 [1]

Aroclor-1242 [1]

Aroclor-1248 [1]

Aroclor-1254 [1]

Aroclor-1260 [1]

Aroclor-1262 [1]

Aroclor-1268 [1]

Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 15:54	MJC
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 15:54	MJC
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 15;54	MJC
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 15:54	MJC
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 [5:54	MJC
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 15:54	MJC
μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 f5:54	MJC
	µg/Wipe µg/Wipe µg/Wipe µg/Wipe µg/Wipe µg/Wipe	µg/Wipe 2	µg/Wipe 2	μg/Wipe 2 SW-846 8082A μg/Wipe 2 SW-846 8082A	Units Dilution Flag Method Prepared μg/Wipe 2 SW-846 8082A 5/29/12 μg/Wipe 2 SW-846 8082A 5/29/12	Units Dilution Flag Method Prepared Analyzed μg/Wipe 2 SW-846 8082A 5/29/12 5/31/12 15:54 χg/Wipe 2 SW-846 8082A 5/29/12 5/31/12 15:54

SW-846 8082A

SW-846 8082A

5/29/12

5/31/12 15:54

MJC

Aroclor-1268 [1]	ИD	0,40	µg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 15:54	MJC
Surrogates		% Recovery	Recovery Limits		Flag				
Decachlorobiphenyl [1]		90.6	30-150					5/31/12 15:54	
Decachlorobiphenyl [2]		90,6	30-150					5/31/12 15:54	
Tetrachloro-m-xylene [1]		94.6	30-150					5/31/12 15:54	
Tetrachloro-m-xylene [2]		98,4	30-150					5/31/12 15:54	

2

μg/Wipe

μg/Wipe



Project Location: Osborne Hill School

Sample Description: Hall Floor O/S Gym

Work Order: 12E1021

Date Received: 5/29/2012

Field Sample #: PCB-Wipe-02

Sampled: 5/26/2012 09:30

Sample ID: 12E1021-02 Sample Matrix; Wipe

		Polychlori	nated Biphenyls wit	th 3540 Soxble	et Extraction				
Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analysi
Aroclor-1016 [1]	ND	1.0	μg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1221 [1]	NĐ	1.0	μg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Arocior-1232 [1]	ND	1.0	μg/Wîpe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1242 [1]	ND	1.0	µg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1248 [1]	ND	1.0	μg/Wîpe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1254 [2]	4.3	1.0	μg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1260 [1]	ND	1.0	μg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1262 [1]	.ND	1.0	μg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MJC
Aroclor-1268 [J]	ND	0.1	μg/Wipe	5		SW-846 8082A	5/29/12	5/31/12 16:07	MIC
Surrogates		% Recovery	Recovery Limits	s	Flag				
Decachlorobiphenyl [1]		83.7	30-150	· · · · · · · · · · · · · · · · · · ·				5/31/12 16:07	
Decachlorobiphenyl [2]		84.6	30-150					5/31/12 16:07	
Tetrachloro-m-xylene [1]		\$4.8	30-150					5/31/12 16:07	
Tetrachloro-m-xylene [2]		88.7	30-150					5/31/12 16:07	



Project Location: Osborne Hill School

Sample Description: Half O/S Gym Wind, Sill

Work Order: 12E1021

Date Received: 5/29/2012 Field Sample #: PCB-Wipe-03

Sampled: 5/26/2012 09:45

Sample ID: 12E1021-03 Sample Matrix: Wine

		Polychlori	nated Biphenyls wit	h 3540 Soxhk	et Extraction				
Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Annlyzed	Analysi
Aroclor-1016 [1]	ND	0.40	μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Aroclor-1221 [J]	ND	0.40	μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Aroclor-1232 [1]	ND	0,40	μg/Wipc	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Aroclor-1242 [1]	ND	0.40	μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	МЈС
Aroclor-1248 [1]	ND	0.40	µg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	МЈС
Aroclor-1254 [2]	3.2	0.40	μ g/W ipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Aroclor-1260 [1]	ND	0.40	μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Aroclor-1262 [1]	ND	0.40	μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Aroclor-1268 [1]	ND	0.40	μg/Wipe	2		SW-846 8082A	5/29/12	5/31/12 16:20	MJC
Surrogates		% Recovery	Recovery Limits		Flag			···	
Decachlorobiphenyl [1]		88,6	30-150					5/31/12 16:20	
Decachlorobiphenyl [2]		88.7	30-150					5/31/12 16:20	
Tetrachloro-m-xylene [1]		88.3	30-150					5/31/12 16:20	
Tetrachioro-m-xylene [2]		91.9	30-150					5/31/12 16:20	



Project Location: Osborne Hill School

Sample Description: Rm 116-Floor

Work Order: 12E1021

Date Received: 5/29/2012 Field Sample #: PCB-Wipe-04

Sampled: 5/26/2012 09:45

Sample ID: 12E1021-04 Sample Matrix: Wine

		Polychlori	nated Biphenyls wit	th 3540 Soxblo	et Extraction				
Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analys
Aroclor-1016 [1]	ND	0,20	μg/Wipe	l		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Aroclor-1223 [1]	ND	0.20	μg/Wipe	l		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Arnelor-1232 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Aroclor-1242 [1]	ND	0,20	μg/Wipe	I		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Arocior-1248 [1]	ИИ	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Aroclor-1254 [2]	0.23	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Areclor-1260 [1]	αи	0.20	μg/Wipc	1		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Aroclor-1262 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Aroclor-1268 [1]	ND	0,20	µg/Wipe	I		SW-846 8082A	5/29/12	5/30/12 17:46	MJC
Surrogates		% Recovery	Recovery Limits	1	Flag		······	 	
Decachlorobiphenyl [1]		92.8	30-150	•••••				5/30/12 17:46	
Decachlorobiphenyi [2]		73.5	30-150					5/30/12 17:46	
Tetrachloro-m-xylene [1]		70.2	30-150					5/30/12 17:46	
Tetrachloro-m-xylene [2]		70.9	30-150					5/30/12 17:46	



Project Location: Osborne Hill School

Sample Description: RM 116 Wind, Sill

78.2

78.1

Work Order: 12E1021

5/30/12 18:00

5/30/12 18:00

Date Received: 5/29/2012 Field Sample #: PCB-Wipe-05

Sampled: 5/26/2012 09:45

Sample ID: 12E1021-05 Sample Matrix: Wipe

Tetrachlore-m-xylene [1]

Tetrachloro-m-xylene [2]

		Polychlori	nated Biphenyls wit	h 3540 Soxbl	et Extraction				
Analyte	Results	RL	Units	Dilution	Flag	Method	Date Prepared	Date/Time Analyzed	Analyst
Aroclor-1016 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	MJC
Aroclor-1221 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	MJC
Aroclor-1232 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	млс
Aroclor-1242 [1]	ND	0.20	μg/Wipe	I		SW-846 8082A	5/29/12	5/30/12 18:00	МЈС
Aroclor-1248 [1]	ИD	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	МЈС
Aroclor-1254 [1]	0.74	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	MJC
Aroclor-1260 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	MJC
Arector-1262 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	MJC
Arector-1268 [1]	ND	0.20	μg/Wipe	1		SW-846 8082A	5/29/12	5/30/12 18:00	MJC
Surrogates		% Recovery	Recovery Limits	·	Flag				
Decachlorobiphenyl [1]		99.0	30-150	· · · · · · · · · · · · · · · · · · ·				5/30/12 18:00	
Decachlorobiphenyl [2]		79.4	30-150					5/30/12 18:00	

30-150

30-150



Sample Extraction Data

Prep Method: SW-846 3540C-SW-846 8082A

Lab Number [Field ID]	Batch	Initial [Wipe]	Final [mL]	Date
12E1021-01 [PCB-Wipe-01]	B052395	1.00	10.0	05/29/12
12E1021-02 [PCB-Wipe-02]	B052395	1.00	10,0	05/29/12
12E1021-03 [PCB-Wipe-03]	B052395	1.00	10.0	05/29/12
12E1021-04 [PCB-Wipe-04]	B052395	00,1	10.0	05/29/12
12E1021-05 [PCB-Wipe-05]	B052395	1.00	10.0	05/29/12



QUALITY CONTROL

Polychlorinated Biphenyls with 3540 Soxhlet Extraction - Quality Control

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
atch B052395 - SW-846 3540C								. ,	• • • • • • • • • • • • • • • • • • • •	
Blank (B052395-BLK1)	52395-BLK1) Prepared: 05/29/12 Analyzed: 05/30/12						. ,			
Aroclor-1016	ND	0.20	μg/Wipe							<u></u>
Aroclor-1016 [2C]	ND	0.20	μg/Wipe							
Arecler-1221	ND	0.20	μg/Wipe							
Aroclor-1221 [2C]	ND	0.20	μg/Wipe							
Aroclor-1232	ND	0.20	μg/Wipe							
Aroclor-1232 [2C]	ND	0,20	μg/Wipe							
Aroclor-1242	ND	0.20	μg/Wipc							
Arocior-1242 [2C]	ND	0.20	μg/Wipc							
ArocIor-1248	ND	0.20	μg/Wipe							
Aroclor-1248 [2C]	ND	0.20	μg/Wipe							
Aroclor-1254	ND	0.20	μg/Wipc							
Aroclor-1254 [2C]	ND	0.20	μg/Wipe							
Aroclor-1260	ND	0,20	µg/Wipe							
Aroclor-1260 [2C]	ND	0.20	µg/Wipe							
Aroclor-1262	ND	0.20	μg/Wipe							
Aroclor-1262 [2C]	ND	0.20	μg/Wipe							
Araclar-1268	ND	0,20	μg/Wipe							
\roclor-1268 [2C]	ND	0.20	μg/Wipe							
urrogate: Decachlorobiphenyl	2,46		μg/Wipe	2.00		123	30-150			
urrogate: Decachlorobiphenyl [2C]	1.90		μg/Wipe	2.00		95.2	30-150			
turrogate: Tetrachloro-m-xylene	2.02		μg/Wipe	2.00		101	30-150			
urrogate: Tetrachloro-m-xylene [2C]	2.07		μg/Wipe	2.08		103	30-150			
.CS (B052395-BS1)				Prepared: 05	5/29/12 Analy	yzed; 05/30/	12			
Arecler-1016	0.52	0.20	μg/Wipc	0.500		104	40-140			_
Aroclor-1016 [2C]	0.53	0.20	μg/Wipe	0.500		107	40-140			
Aroclor-1260	0.57	0,20	μg/Wipe	0,500		115	40-140			
Aroclor-1260 [2C]	0.57	0,20	µg/Wipe	0.500		115	40-140			
urrogate: Decachlorobiphenyl	2.45		μg/Wipe	2.00		123	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.90		μg/Wipe	2,00		94.8	30-150			
Surrogate: Tetrachloro-m-xylene	1.99		μg/Wipe	2.00		99.4	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	2.03		μg/Wipe	2.00		102	30-150			
.CS Dup (B052395-RSD1)	Prepared: 05/29/12 Analyzed: 05/30/12									
Aroclor-1016	0.58	0.20	μg/Wipe	0.500		115	40-140	9.99	30	
Aroclor-1016 [2C]	0.59	0,20	μg/Wipe	0.500		118	40-140	9.51	30	
Aroclor-1260	0.59	0.20	μg/Wipe	0.500		118	40-140	2.64	30	
Aroclor-1260 [2C]	0.59	0.20	µg/Wipe	0.500		118	40-140	2.66	30	
Surrogate: Decachlorohiphenyl	2.50		μg/Wipe	2,00		125	30-150			
Surrogate: Decachlorobiphenyl [2C]	1.94		μg/Wipe	2,00		96.8	30-150			
Surrogate: Tetrachloro-m-xylene	2.32		μg/Wipe	2.00		116	30-150			
Surrogate: Tetrachloro-m-xylene [2C]	2.38		μg/Wipe	2.00		119	30-150			



FLAG/QUALIFIER SUMMARY

_		
•	OC result is outside of established lin	nits

- Wide recovery limits established for difficult compound.
- \$\foatie{\text{Wide RPD limits established for difficult compound.}}\$
- # Data exceeded client recommended or regulatory level

Percent recoveries and relative percent differences (RPDs) are determined by the software using values in the calculation which have not been rounded.



CERTIFICATIONS

Certified Analyses included in this Report

Analyte

Certifications

No certified Analyses included in this Report

The CON-TEST Environmental Laboratory operates under the following certifications and accreditations:

Code	Description	Number	Expires
AIHA	AIHA-LAP, LLC	100033	02/1/2014
MA	Massachusetts DEP	M-MA100	06/30/2012
CT	Connecticut Department of Public Health	PH-0567	09/30/2013
NY	New York State Department of Health	10899 NELAP	04/1/2013
NH ·	New Hampshire Environmental Lab	2516 NELAP	02/5/2013
RI	Rhode Island Department of Health	LAO00112	12/30/2012
NC	North Carolina Div. of Water Quality	652	12/31/2012
NJ	New Jersey DEP	MA007 NELAP	06/30/2012
FL	Florida Department of Health	E871027 NELAP	06/30/2012
VT	Vermont Department of Health Lead Laboratory	LL015036	07/30/2012
WA	State of Washington Department of Ecology	C2065	02/23/2013
ME	State of Maine	2011028	06/9/2013
VA	Commonwealth of Virginia	1381	12/14/2012

39 Spruce St.
East Longmeadow, MA. 01028
P: 413-525-2332
F: 413-525-6405
www.contestlabs.com





Sample Receipt Checklist

A MA			
CLIENT NAME: AMC En	liromental RE	CEIVED BY: JB	DATE: 5/29/12
1) Was the chain(s) of custody	relinguished and aims to		
2) Does the chain agree with th	. omderen and sigued;	Yes No	No CoC Included
If not, explain:	e samples?	(Yes) No	
3) Are all the samples in good o	eondition?		
If not, explain:	ondition:	(Yes) No	
4) How were the samples receiv	red:	,	
}	C !	bient In Cooler(s)	
Were the samples received in T	emperature Compliance	* (a aso) a	Ц
Temperature °C by Temp blank			N/A
	Ten	nperature °C by Temp gun	3,2
5) Are there Dissolved samples	for the lab to filter?	Van AE	
Who was notified	Date	Yes No)
i) Are there any RUSH or SHOR	T HOLDING TIME sample	-	
Who was notified	Date	s? Yes No)
) Location where samples are stor	-4 (0		ntract samples? Yes No
, see an	ed: / 9	(Walk-in clients only) if not already approved
	<u> </u>	Client Signature:	
) Do all samples have the prope	er Acid pH: Yes No /		
) Do all samples have the prope	er Base pH: Yes No		-
		NA)	
C	ontainers receiv	ed at Con-Test	
	# of containers		4 05
1 Liter Amber		8 oz amber/clear jar	# of containers
500 mL Amber		4 oz amber/ciear jar	> 5
250 mL Amber (8oz amber)		2 oz amber/clear jar	
1 Liter Plastic 500 mL Plastic		Air Cassette	
250 mL Plastic		Hg/Hopcalite Tube	
40 mL Vial - type listed below		Plastic Bag / Ziploc	
Colisure / bacteria bottle		PM 2.5 / PM 10	
Dissolved Oxygen bottle		PUF Cartridge	
Encore		SOC Kit	
Flashpoint bottle		TO-17 Tubes	
Perchlorate Kit		Non-ConTest Containe	r
Other		Other glass jar Other	
boratory Comments:		Ouler	
40 mL vials: # HCI	# 5 f - xl		Time and Date Frozen:
c# 277 # Bisulfate	# Methanol		MINE WINE WATER I TOZETT
•	# DI Water _		1
v. 2 Sept 2011 # Thiosulfate	Unpreserved		Page 14 of