Limited PCB Bulk Sampling Report

Stratfield Elementary School
Fairfield, Connecticut

Silver Petrucelli & Associates

Hamden, Connecticut

January 2012

FUSS & O'NEILL
EnviroScience, LLC

56 Quarry Road
Trumbull, CT 06611

Project No. 20072231.A5E

FUSS & O'NEILL
EnviroScience, LLC

January 17, 2012

Mr. Ted Kenney
Silver Petrucelli & Associates
3190 Whitney Avenue, Building 2
Hamden, CT 06518

RE: Limited PCB Bulk Sampling Report
Stratfield Elementary School
1370 Melville Avenue
Fairfield, Connecticut
Fuss & O'Neill EnviroScience Project No. 20072231.A5E

Dear Mr. Kenney:

Attached is the report for the limited bulk sampling of suspect PCB containing materials (ACM) at Stratfield Elementary School, 1370 Melville Avenue, Fairfield, Connecticut. This report encompasses sampling performed during May and June of 2011.

The information summarized in this document is for the above-mentioned materials and locations only. It does not include information on other hazardous materials that may exist in the property (such as underground storage tanks, asbestos containing materials, lead based paint, additional PCB containing materials, mercury devices, etc.).

If you have any questions regarding the contents of this report, please do not hesitate to contact us at (203) 374-3748. Thank you for this opportunity to have served your environmental needs.

Sincerely,

Matthew Myers
Associate

Stephen W. Connelly
Senior Vice President

KM/nw

c: Sal Morabito, Fairfield School System

Enclosure

56 Quarry Road
Trumbull, CT
06611
t 203.374.3748
800.286.2469
f .203.374.4391
www.fando.com
Connecticut
Massachusetts
Rhode Island
South Carolina

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1 Introduction

Sampling of building materials for polychlorinated biphenyls (PCBs) is presently not mandated by the USEPA. However, significant liability exists for building owners who improperly dispose of a PCB containing waste material. Recent knowledge and awareness of PCB's within matrices such as caulking compounds, glazing compounds, paints, adhesives, and ceiling tiles has become more prevalent especially amongst remediation contractors, waste haulers, and disposal facilities.

Presently, building materials containing PCBs at concentrations equal to or greater than (≥) 50 parts per million (ppm) or the equivalent units of milligrams per kilogram (mg/kg) are regulated by the USEPA. Building materials containing less than (<) 50 ppm may also be regulated unless proven to be an "Excluded PCB Product". The definition of an Excluded PCB Product includes those products or source of the products containing <50 ppm concentration PCBs that were legally manufactured, processed, distributed in commerce, or used before October 1, 1984.

Additionally, the identification of building materials containing regulated PCBs requires additional testing of the adjacent building materials. The building materials adjacent to the regulated PCB material must be tested to determine if the adjacent materials are PCB contaminated.

On May 9, 2011, and June 16, 2011, EnviroScience representatives collected eleven (11) bulk samples of exterior concrete caulking compounds, exterior door caulking compounds, exterior door lintel caulking compounds, exterior door frame window glazing compounds, exterior expansion caulking compounds, exterior roof coping caulking compounds, and exterior wood column caulking compounds to be analyzed for PCBs. The materials sampled were related to the planned renovation activities that were to disturb the sampled materials at Stratfield Elementary School in Fairfield, Connecticut.

Sampling involved removal of the caulking and/or glazing compounds using hand tools to submit in bulk form to determine PCB content. The tools utilized to collect samples were properly decontaminated prior to sample collection and following the collection of each individual sample according to USEPA guidelines to prevent cross-contamination of samples. Each sample was placed in a container, labeled, and delivered to a laboratory using proper chain of custody. Samples were analyzed at Phoenix Environmental Laboratories, Inc. located in Manchester, Connecticut. The analytical method for analysis included extraction method 3540C and analysis method SW846 8082.

2 Results

EnviroScience collected a total of eleven (11) bulk samples to determine PCBs content. The following table identifies the collected samples by location, material type, sample identification number, and PCB content.

TABLE 1

SAMPLED LOCATION	MATERIAL TYPE	SAMPLE ID	PCB CONTENT (ppm)
1929 Building – Concrete Trim	Exterior Concrete Caulking Compounds	2011-0509-0919-ECC-01	ND <0.81

SAMPLED LOCATION	MATERIAL TYPE	SAMPLE ID	PCB CONTENT (ppm)
1929 Building – Media Center	Exterior Door Caulking Compounds	2011-0509-0919-EDC-01	130 ppm (Aroclor 1254)
	Exterior Door Lintel Caulking Compounds	2011-0509-0919-EDLC-01	1.2 ppm (Aroclor 1254)
	Exterior Door Frame Window Glazing Compounds	2011-0509-0919-EDFWG-01	ND <0.82
1929 Building – Gymnasium	Exterior Expansion Caulking Compounds	2011-0509-0919-EEC-01	19 ppm (Aroclor 1254)
1929 Building – Kitchen to Classroom Addition Roof		2011-0509-0919-EEC-02	0.93 ppm (Aroclor 1254)
1929 Building – South Stairwell		2011-0509-0919-EEC-03	ND < 0.83
1929 Building – Exterior Roof	Exterior Roof Coping Caulking Compounds	2011-0509-0919-ERCC-01	1 ppm (Aroclor 1254)
1929 Building – East Entrance	Exterior Wood Column Caulking Compounds	2011-0509-0919-EWCC-01	5.2 ppm (Aroclor 1254)
1929 Building – Media Center North Entrance	Exterior Door Caulking Compounds	2011-0616-0926-EDC-01	58,000 ppm (Aroclor 1260)
1929 Building – Former Main Entrance	Exterior Door Caulking Compounds	2011-0616-0926-EDC-02	10 ppm (Aroclor 1260)

NOTE: ND – None Detected

3 Conclusion

EnviroScience performed testing for PCBs and identified the presence of regulated PCBs (≥50 ppm) in the exterior door caulking compounds associated with 1929 building media center. Materials containing between >1 ppm and <50 ppm PCBs were identified in limited areas and can be determined to be an Excluded PCB Product if adjacent porous surface sampling is performed and the results indicate that concentrations of PCBs in the source materials are not a result of a previous source contamination.

Please see *Appendix C* for the chain-of-custody and sample results

4 Recommendations

The materials associated with the exterior door caulking compounds in the 1929 building media center were determined to contain ≥50 ppm of PCBs making the materials a PCB Bulk Product and regulated by the USEPA. A Self Implementing Cleanup and Disposal Plan (SIP) should be developed for the remediation of the caulking compounds. Prior to development of the SIP for the exterior door caulking compounds, additional sampling of adjacent porous brick and concrete paving must be performed to characterize PCB concentrations in the adjacent porous materials.

If the exterior door caulking compounds are not currently scheduled to be remediated, a monitoring (interim control) program should be developed. This monitoring program should be approved by the USEPA and include annual and/or semi-annual air and wipe sampling to demonstrate occupant exposure concentrations, a community outreach program to communicate and inform occupants of PCB locations in the building, and an operations and maintenance program to visually inspect and repair deteriorated caulking compounds.

The caulking compounds that contain >1 ppm and <50 ppm PCBs should have adjacent porous surface sampling performed. This adjacent porous surface sampling would determine if PCB concentrations in the source materials are a result of contamination from a previous source. If adjacent porous surface sampling determines that the source materials contain PCBs due to contamination from a previous source, then the materials are considered a PCB Remediation Waste and are regulated by the USEPA. The materials must then be handled in a way similar to the exterior door caulking compounds.

If adjacent porous surface sampling determines that the source materials containing PCBs are not due to contamination from a previous source, then the materials are considered an Excluded PCB Product and are not regulated by the USEPA. However, Excluded PCB Products are regulated by the CTDEEP. Currently, CTDEEP only enforce s the disposal of PCB containing waste. Once the materials are removed; the materials must be disposed at an appropriate waste facility which can accept waste which contains <50 ppm PCBs.

Report prepared by Environmental Scientist Kevin McCarthy.

Reviewed by:

Matthew Myers
Associate

Stephen W. Connelly
Senior Vice President