

October 20, 2015

Mr. Bernard P. Orlan
Director, Environmental Health & Safety
New York City Department of Education
44-36 Vernon Blvd., 3rd Floor
Long Island City, NY 11101

Re: PCB Wipe Sampling Report
Harry Van Arsdale Voc. HS (K650)
Cardno ATC Project: No. Z214AA-0776
Work Order No. 00590298 04

Dear Mr. Orlan:

Cardno ATC was retained by NYC-DOE to perform a limited PCB wipe sampling inspection at K650 located at 257 North 6th Street, Brooklyn, NY 11211. The inspection was performed by Mr. Diego Lopez on October 19, 2015 and it was limited to wipe samples collection and analysis within Room #501 to determine if any surface was contaminated with PCB, following the removal of failed T-12 light fixture ballast. The light fixture ballast was removed by Triumvirate Environmental, a hazardous waste management contractor retained by NYC-DOE to provide removal and clean up services.

BACKGROUND

Polychlorinated biphenyls are a group of man-made chemicals that can cause a number of different harmful effects. PCB's are either oily liquids or solids and are colorless to light yellow. There are no known natural sources of PCB's in the environment. PCB's were used mainly in making electrical transformers, capacitors and other heat transfer devices but some were also used in building materials.

PCB's may be present in older fluorescent light fixtures in any school building that had fluorescent lights installed before 1979 and never had a lighting upgrade. The ballast is a transformer inside the light fixture that is not accessible unless the light is disassembled. PCB's are contained within the light ballasts' capacitors and in the ballasts' potting material (a black tar-like substance used to protect the capacitor). As the ballast ages, it can overheat causing a burning or smoky odor or in some cases, causing tar from the potting material or oil to drip from the fixture.

Indications of leaking PCB ballasts may include the presence of an oily film on the metal casing, a leaking putty-like compound (the potting material), or discoloration of the metal casing. Other leaking signs include drips, buzzing, and discoloration of the light ends. Almost all ballast casings are a single color (often black or white) with a contrasting label. Leaks, when present, are usually found around the metal seams of the casing. Indications of burning PCB ballast may include: an acrid and burning tar odor; melted tar oozing from the casing seams; and visible electrical lead bushings. It is very rare for PCB ballasts to actually catch on fire.

Evaluation Criteria for PCB Spills

PCB manufacture, use, storage and disposal are regulated by U.S. EPA under TSCA and Part 761, Title 40 of the Code of Federal Regulations (40 CFR Part 761). TSCA regulates any materials or wastes that contain PCBs at concentrations of 50 ppm (parts per million) or greater. Light ballasts containing PCB oil in the small capacitor or the potting compound are included in this regulation. Leaking PCB ballasts are regulated as hazardous wastes and toxic substances. Proper handling and cleanup of leaking PCB ballasts is necessary to protect public health and the environment. TSCA regulates disposal of PCB wastes with concentrations over 1 ppm. Leaking PCB light ballasts often generate wastes in excess of 1 ppm. In addition, PCBs are regulated under TSCA if an impervious surface shows 10 micrograms (ug) per 100 square centimeters (cm²) of PCBs. Examples of this in the classroom are the surfaces of floors, desks, and bookcases.

PCB WIPE SAMPLES

Cardno ATC collected a total of three (3) samples (two surface samples and one blank) within Room #501 and subsequently sent them to New York Environmental and Analytical Labs., Inc. for analysis via EPA 8082 Method. All samples were obtained in accordance with EPA 40CFR 761.123 and NYC-DOE "PCB Light Ballasts Wipe Sampling Protocol" and included using a 10x10 cm template to outline the sample area and a sterile gauze pad wetted with hexane or reagent grade acetone to collect the sample. The hexane or reagent grade acetone wetted pad was used to wipe the area outlined with the 100 cm² template or the measured area if the area is an irregular surface. The area was wiped completely twice, from left to right and then from top to bottom. For waxed surfaces such as floors the wetting agent used is de-ionized water or distilled water because solvents used on waxed surfaces will not give an accurate analysis for PCB's. The wipe media was then inserted into a 6 ounce sterilized glass vial and delivered to the laboratory.

The following table summarizes the inspection results:

Table 1.0 PCB Wipe Sample Results (after ballast removal)

Sample Id. No.	Location	Type of Surface Sampled	Sample Media	Detection Limit (ug/cm ²)	Result (ug/cm ²)
01	Blank	Blank	Gauze Pad w/ hexane or reagent acetone	3	<3
02	Room #501	Floor- 12x12 gray VFT (x=8.09, y=13.09)	Gauze Pad w/ deionized water	0.03	<0.03
03	Room #501	Desk (x=8.02, y=16.06)	Gauze Pad w/ hexane or reagent acetone	0.03	<0.03

CONCLUSIONS

Wipe samples obtained from desk and floor within Room #501 show PCB concentrations to be below the detection limit.

Cardno ATC is pleased to be of service to the New York City Department of Education. Please feel free to contact us at (212) 353 8280 ext. 268 if you should have any questions or comments concerning this report.

Cardno ATC



Mike Balota
Project Manager

Appendixes: A- PCB Data and Chain of Custody Forms
B- PCB Analytical Results
C- Laboratory Certifications
D- NYC DOE Work Order Request

APPENDIX A

PCB DATA AND CHAIN OF CUSTODY FORMS

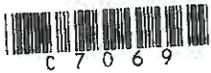
44025

PCB WIPE SAMPLING COC

PROJECT INFORMATION

1. Client: NYC-DOE		2. Project Name: K650		3a. ATC Project No.: Z214AA.0716		4a. Project Manager: Dragos Balota	
5. Date: 10/19/15		6. Building Name:		3b. Task No.: 0001		4b. Inspector: Diego Lopez	
7. Location - Room #: 501		8. Turnaround Time: RUSH (6 hours or less)		9. Comments (Field) Analyze all samples via 8082 Method			

WIPE SAMPLE LOCATION

10. Sample ID No.	11. LAB ID No.	12. Room No.	13A. Surface Sampled	13B. Sample Coordinates (x and y)	14. MEDIA	15. Area Sampled (cm ²)	16. MDL (ug/cm ²)	16A. RESULT (ug/cm ²)
01			BLANK		Gauze Pad w/ Hexane		3 ug	< 3 ug
02		501	Floor VFT 14x12 S124	X=8'09 Y=13'09	Deion H2O	100cm ²	0.03	< 0.03
03			Desk	X=8'02 Y 16'00	Gauze Pad w/ Hex.		0.03	< 0.03
 C 7 0 6 9								

CHAIN OF CUSTODY

17. Relinquished By	18. Date	19. Time	20. Received By	21. Date	22. Time	23. Method of Submittal	
D. Lopez	10/19/15	1830	[Signature]	10-19-15	1800	Field	
II.						Walk In	<input checked="" type="checkbox"/>
III.						US Mail	
						Fed-Ex	
						Other	

LABORATORY INFORMATION

24. Name and Signature:	25. Date	26 Time	27. Comments: Please email results to dragos.balota@cardno.com
24a. Analyzed By:			
24b. Analyzed By:			
24c. QC By:			

APPENDIX B

PCB ANALYTICAL RESULTS

ANALYTICAL REPORT for PCBs

Project Information	Batch Information	Client Information
NYE Project No.: 44025 Client Project No.: K650 / Z214AA.07 Street: 257 North 6th Street City: Brooklyn, NY	Batch No.: C7069 Field Tech: Total Samples: 3 Date Sampled: 10/19/2015 Date Received: 10/19/2015 Date Analyzed: 10/20/2015 Date Reported: 10/20/2015	Client No.: 18810 Name: Cardno ATC Street: 104 E. 25th Street, 10th Floor City/State/Zip: New York NY 10010 Phone/Fax: (212) 353-8280 (212) 353-8306 Contact: M Bonezzi

SAMPLE INFORMATION

Field Sample ID: 1	Sample Batch No. C7069-1
Sample Location Blank	Matrix: Wipe

ANALYTICAL RESULTS

PCB ID	CAS No.	Result (µg)	MDL (µg)
PCB 1016	12674-11-2	< 3	3
PCB 1221	11104-28-2	< 3	3
PCB 1232	11141-16-5	< 3	3
PCB 1242	53469-21-9	< 3	3
PCB 1248	12672-29-6	< 3	3
PCB 1254	11097-69-1	< 3	3
PCB 1260	11096-82-5	< 3	3

Comment:

Lab. Certification

ELAP #: 11510

Testing Method

GC/ECD

EPA 3550C (prep) & 8082A (analysis)

[Handwritten Signature]
L. Tsang
 Chemist

[Handwritten Signature]
Li Tsang
 Laboratory Director

The analytical results contained within this report relate only to the samples tested in the condition received by the laboratory. This report must not be reproduced except in its entirety unless with the laboratory's written approval



ANALYTICAL REPORT for PCBs

Project Information	Batch Information	Client Information
NYE Project No.: 44025 Client Project No.: K650 / Z214AA.07 Street: 257 North 6th Street City: Brooklyn, NY	Batch No.: C7069 Field Tech: _____ Total Samples: 3 Date Sampled: 10/19/2015 Date Received: 10/19/2015 Date Analyzed: 10/20/2015 Date Reported: 10/20/2015	Client No.: 18810 Name: Cardno ATC Street: 104 E. 25th Street, 10th Floor City/State/Zip: New York NY 10010 Phone/Fax: (212) 353-8280 (212) 353-8306 Contact: M Bonezzi

SAMPLE INFORMATION

Field Sample ID: 2	Sample Batch No. C7069-2
Sample Location: Room 501, 12x12 Vinyl Floor Tile	Matrix: Wipe

ANALYTICAL RESULTS

PCB ID	CAS No.	Result (µg/cm³)	MDL (µg/cm³)
PCB 1016	12674-11-2	< 0.03	0.03
PCB 1221	11104-28-2	< 0.03	0.03
PCB 1232	11141-16-5	< 0.03	0.03
PCB 1242	53469-21-9	< 0.03	0.03
PCB 1248	12672-29-6	< 0.03	0.03
PCB 1254	11097-69-1	< 0.03	0.03
PCB 1260	11096-82-5	< 0.03	0.03

Comment:

Lab. Certification

ELAP #: 11510

Testing Method

GC/ECD

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 Chemist



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ANALYTICAL REPORT for PCBs

Project Information	Batch Information	Client Information
NYE Project No.: 44025 Client Project No.: K650 / Z214AA.07 Street: 257 North 6th Street City: Brooklyn, NY	Batch No.: C7069 Field Tech: Total Samples: 3 Date Sampled: 10/19/2015 Date Received: 10/19/2015 Date Analyzed: 10/20/2015 Date Reported: 10/20/2015	Client No.: 18810 Name: Cardno ATC Street: 104 E. 25th Street, 10th Floor City/State/Zip: New York NY 10010 Phone/Fax: (212) 353-8280 (212) 353-8306 Contact: M Bonezzi

SAMPLE INFORMATION

Field Sample ID: 3	Sample Batch No. C7069-3
Sample Location: Room 501, Desk	Matrix: Wipe

ANALYTICAL RESULTS

PCB ID	CAS No.	Result (µg/cm ²)	MDL (µg/cm ²)
PCB 1016	12674-11-2	< 0.03	0.03
PCB 1221	11104-28-2	< 0.03	0.03
PCB 1232	11141-16-5	< 0.03	0.03
PCB 1242	53469-21-9	< 0.03	0.03
PCB 1248	12672-29-6	< 0.03	0.03
PCB 1254	11097-69-1	< 0.03	0.03
PCB 1260	11096-82-5	< 0.03	0.03

Comment:

Lab. Certification

ELAP #: 11510

Testing Method

GC/ECD

EPA 3550C (prep) & 8082A (analysis)

LS
L. Tsang
 Chemist

LS
Li Tsang
 Laboratory Director

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APPENDIX C

LABOARTORY CERTIFICATIONS

NEW YORK STATE DEPARTMENT OF HEALTH
WADSWORTH CENTER

Expires 12:01 AM April 01, 2015
Issued April 01, 2014



CERTIFICATE OF APPROVAL FOR LABORATORY SERVICE

Issued in accordance with and pursuant to section 5021 of the Health Law of New York State

MR. LI TSANG
NY ENVIRONMENTAL AND ANALYTICAL LABS INC
38 HARBOR ROAD
PORT WASHINGTON, NY 11050

NY Lab Id No. 11810

is hereby APPROVED as an Environmental Laboratory in conformance with the
National Environmental Laboratory Accreditation Conference Standards (2003) for the category:
ENVIRONMENTAL ANALYSES SOLID AND HAZARDOUS WASTE
All approved analyses are listed below.

Characteristic Testing

TC:P

EPA 1311

Polychlorinated Biphenyls

PCB-1010

EPA

PCB-1221

EPA

PCB-1293

EPA

PCB-1242

EPA

PCB-1248

EPA 8060A

PCB-1254

EPA 8060A

PCB-1260

EPA 8060A

Sample Preparation Methods

EPA 8850C



Serial No.: 50889

Property of the New York State Department of Health. Certificates are valid only at the address shown, which is conspicuously posted, and are printed on security paper. Continued accreditation depends on successful ongoing participation in the Program. Certificates are issued in accordance with § 5021 of the Health Law of New York State.

APPENDIX D

NYC DOE WORK ORDER REQUEST

Facility: DSF DIVISION OF SCHOOL FACILITIES
 Unit : K Project :
 W/O Type: CO Task Pri: 04 Tsk Dspln: H
 Planner : SNAPOLIT NAPOLITANO
 W/O Title : 75/14K650/ REMOVE & REPLACE SMOKING
 W/O Task Title: 75/14K650/ PREFORM PCB WIPE TEST/ SM
 Written To : HARRY VANARSDALE VOC H (WHITNEY)-K
 Completed By:



776

Work Order Package

00590298 04

Rpt : TIPMC11
Date: 10/19/2015



NEW YORK CITY
DEPT. OF EDUCATION

Page: 1

Work Order Task Written To

Facility : DSF	Unit : K	Op Sys : GEO-14
Division : ABLDG K650	Area : ISC4	Sys/Cls: K650
Equipment : ABLDG K650	Component:	
Work Item :	Eqt. List:	Ops Review Reqd: N
Equip. Tag:	Alt:	
UTC :	Tbl/Brkdwn: (Past 12 mo)	
Catalog ID:	Job Type : ET UCR: GN16	
Client/Act: ALAC6132	ANTHONY LACHTARA	
Location : K02 33000011 000001 257 N 6TH ST, BROOKLYN, NY 11211		
Cost Centr: G839	Activity :	User Def:
Percentage: 100.000	Acct No. : GL	

Work Order Task Instructions

PREFORM PCB WIPE TEST/ SMOKING BALLAST
 LOCATED IN ROOM 501
 Custodian MICHAEL FINNERAN 718-302-0004

Completion Comments on Work Performed

Completion Comments Required : N

Comments:

Comments:

Comments:

Continued on Additional Sheets? : _____