

June 11, 2015

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

**Re: PCB Wipe Sampling Report  
I.S. 318K  
Cardno ATC Project: No. Z214DB-7027  
Work Order No. 00578070 03**

Dear Mr. Orlan:

Cardno ATC was retained by NYC-DOE to perform a limited PCB wipe sampling inspection at K318 located at 101 Walton Street, Brooklyn, NY 11206. The inspection was performed by Mr. Diego Lopez on June 10, 2015 and it was limited to wipe samples collection and analysis within Room #242 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 (cm<sup>2</sup>) 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 #242 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 cm<sup>2</sup> 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 <sup>2</sup> )	Result (ug/cm <sup>2</sup> )
01	Blank	Blank	Gauze Pad w/ hexane or reagent acetone	3	<3
02	Room #242	Top of wood shelf (x=3.0, y=4.0)	Gauze Pad w/ hexane or reagent acetone	0.03	<0.03
03	Room #242	Floor- 9x9 beige vinyl VFT (x=5.0, y=3.0)	Gauze Pad w/ deionized water	0.03	<0.03

## CONCLUSIONS

Wipe samples obtained from shelf and floor within Room #242 show PCB concentrations to be below 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**

**PCB WIPE SAMPLING COC**

PR 43119

**PROJECT INFORMATION**

1. Client: <b>NYC-DOE</b>	2. Project Name: <b>IS-318</b>	3a. ATC Project No.: <b>42872. 2214 DB7027</b>	4a. Project Manager: <b>Dragos Balota</b>
	2a. Project Address: <b>101 WALTON ST, BRKLYN, NY 11206</b>	3b. Task No.: <b>0001</b>	4b. Inspector: <b>Ricardo Vilchez</b>
5. Date: <b>06-10-15</b>	6. Building Name:	8. Turnaround Time: <b>RUSH (6 hours or less)</b>	9. Comments (Field) Analyze all samples via 8082 Method.
7. Location: Room # <b>242</b>			

**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 <sup>2</sup> )	16. MDL (ug/ cm <sup>2</sup> )	16A. RESULT (ug/ cm <sup>2</sup> )
242-01		242	---	BLANK	Gauze Pad w/ Hexane	---	3ug	< 3ug
242-02		242	TOP OF WOOD BOOKSHELF	X → 3' Y → 4'	GAUZE PAD W/HEXANE	100	0.03	ND < 0.03
242-03		242	9" x 9" BEIGE, VINYL FLOOR TILE	X → 5' Y → 3'	GAUZE PAD W/ DILUTE WATER	100	0.03	ND < 0.03

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 C 6 4 1 8

**CHAIN OF CUSTODY**

17. Relinquished By	18. Date	19. Time	20. Received By	21. Date	22. Time	23. Method of Submission
I. RICARDO VILCHEZ	6-10-15		VTSANG	6/10/15	1630	Field
II.						Water
III.						US Mail
						Fed-Ex
						Other

**LABORATORY INFORMATION**

24. Name and Signature: <i>Vilchez</i>	25. Date: <b>6-10-15</b>	26. Time: <b>20:30</b>	27. Comments: Please email results to dragos.balota@cardno.com
24a. Analyzed By:			
24b. Analyzed By: <i>VTSANG</i>			
24c. QC By:			

**APPENDIX B**

**PCB ANALYTICAL RESULTS**

**ANALYTICAL REPORT for PCBs**

Project Information	Batch Information	Client Information
NYE Project No.: 43119 Client Project No.: See Comments Street: 101 Walton St City: Brooklyn, NY	Batch No.: C6418 Field Tech: Client Total Samples: 3 Date Sampled: 6/10/2015 Date Received: 6/10/2015 Date Analyzed: 6/6/1020 Date Reported: 6/11/2015	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: 242-1	Sample Batch No. C6418-1
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: K318 / Z214.DB7027

**Lab. Certification**

ELAP #: 11510

**Testing Method**

GC/ECD

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



W. Cheung  
 Chemist



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.: 43119 Client Project No.: See Comments Street: 101 Walton St City: Brooklyn, NY	Batch No.: C6418 Field Tech: Client Total Samples: 3 Date Sampled: 6/10/2015 Date Received: 6/10/2015 Date Analyzed: 6/6/1020 Date Reported: 6/11/2015	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: 242-2	Sample Batch No. C6418-2
Sample Location: Room 242, Top Of Wood Book Shelf	Matrix: Wipe

**ANALYTICAL RESULTS**

PCB ID	CAS No.	Result (µg/cm <sup>2</sup> )	MDL (µg/cm <sup>2</sup> )
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: K318 / Z214.DB7027

**Lab. Certification**  
 ELAP #: 11510  
**Testing Method**  
 GC/ECD  
 EPA 3550C (prep) & 8082A (analysis)

  
**W. Cheung**  
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**ANALYTICAL REPORT for PCBs**

Project Information	Batch Information	Client Information
NYE Project No.: 43119 Client Project No.: See Comments Street: 101 Walton St City: Brooklyn, NY	Batch No.: C6418 Field Tech: Client Total Samples: 3 Date Sampled: 6/10/2015 Date Received: 6/10/2015 Date Analyzed: 6/6/1020 Date Reported: 6/11/2015	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**

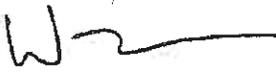
Field Sample ID: 242-3	Sample Batch No. C6418-3
Sample Location: Room 242, 9x9 Beige Vinyl Floor Tile	Matrix: Wipe

**ANALYTICAL RESULTS**

PCB ID	CAS No.	Result (µg/cm <sup>2</sup> )	MDL (µg/cm <sup>2</sup> )
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: K318 / Z214.DB7027

**Lab. Certification**  
 ELAP #: 11510  
**Testing Method**  
 GC/ECD  
 EPA 3550C (prep) & 8082A (analysis)

  
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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 502 Public Health Law of New York State

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

NY Lab id No: 11510

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 analytes are listed below:

Characteristic Testing

TCLP

EPA 1311

Polychlorinated Biphenyls

PCB-1016

PCB-1221

PCB-1232

PCB-1242

PCB-1248

PCB-1254

PCB-1260

EPA

EPA

EPA

EPA

EPA 8010A

EPA 8010A

EPA 8010A

EPA 8010A

EPA 8010C

EPA 8010C

Sample Preparation Methods

Serial No. 50899

Property of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on secure paper. Denial of accreditation depends on all aspects of ongoing participation in the Program. Consumers are urged to call (516) 455-5570 to verify this laboratory's accreditation status.

**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 : 75/14K318/ REMOVE & REPLACE SMOKING  
 W/O Task Title: 75/14K318/ PREFORM PCB WIPE TEST (SM  
 Written To : I.S. 318 - BROOKLYN  
 Completed By:

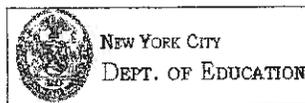


7027

**Work Order Package**

00578070 03

Rpt : TIPMC11  
Date: 06/10/2015



Page: 1

**Work Order Task Written To**

Facility : DSF	Unit : K	Op Sys : GEO-14
Division : ABLDG K318	Area : ISC4	Sys/Cls: K318
Equipment : ABLDG K318	Component:	
Work Item :	Eqt. List:	Ops Review Reqd: N
Equip. Tag:	Alt:	
UTC :	Tbl/Brkdwn: (Past 12 mo)	
Catalog ID:	Job Type : ET UCR: LB15	
Client/Act: TWIS5265	THOMAS WISE	
Location : K02 24600001 000001 101 WALTON ST, BROOKLYN, NY 11206		
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 242  
 Custodian FRANK KAVALER 718-387-6174  
 \*\*\*\*\*  
 ASSIGNED TO ATC ON 6/10/15

**Completion Comments on Work Performed**

Completion Comments Required : N

Comments:


Comments:


Comments:


Continued on Additional Sheets? : \_\_\_\_\_