

April 24, 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  
Harry S. Truman HS (X455)  
Cardno ATC Project: No. Z214DB-6724  
Work Order No. 00573277 04**

Dear Mr. Orlan:

Cardno ATC was retained by NYC-DOE to perform a limited PCB wipe sampling inspection at X455 located at 750 Baychester Avenue, Bronx, NY 10475. The inspection was performed by Mr. Diego Lopez on April 22, 2015 and it was limited to wipe samples collection and analysis within Gymnasium 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 Gymnasium 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	Gymnasium	Hardwood floor (x=24.02, y=98.02)	Gauze Pad w/ deionized water	0.03	<0.03
03	Gymnasium	Hardwood floor (x=24.03, y=99.04)	Gauze Pad w/ deionized water	0.03	<0.03

## CONCLUSIONS

Wipe samples obtained from Gymnasium floor 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

#42776

**PCB WIPE SAMPLING COC**

**PROJECT INFORMATION**

1. Client: <b>NYC-DOE</b>		2. Project Name: <b>X455</b>	3a. ATC Project No.: <b>Z214DB. 6724</b>	4a. Project Manager: <b>Dragos Balota</b>
5. Date: <b>4/22/15</b>		2a. Project Address: <b>750 Rochester Ave</b>	3b. Task No.: <b>0001</b>	4b. Inspector: <b>Diego Lopez</b>
6. Building Name: <b>Gym</b>		7. Location: Room # <b>Gym</b>		8. Turnaround Time: <b>RUSH (6 hours or less)</b>
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 <sup>2</sup> )	16. MDL (ug/cm <sup>2</sup> )	16A. RESULT (ug/cm <sup>2</sup> )
01			BLANK		Gauze Pad w/ Hexane		3 mg	< 3 mg
02		Gym	wood floor	X=24'02 Y=98'02	DEION H2O	100cm <sup>2</sup>	0.03	< 0.03
03		Gym		X=24'03 Y=99'04			0.03	< 0.03
<p>2151176</p>  <p>C 6 0 8 9</p>								

**CHAIN OF CUSTODY**

17. Relinquished By	18. Date	19. Time	20. Received By	21. Date	22. Time	23. Method of Submittal
I. <b>D. Lopez</b>	<b>4/22/15</b>		<b>Wai S Chang</b>	<b>4/22/15</b>	<b>6:00 PM</b>	Field Walk In <input checked="" type="checkbox"/>
II.						US Mail <input type="checkbox"/>
III.						Fed-Ex <input type="checkbox"/>
						Other <input type="checkbox"/>

**LABORATORY INFORMATION**

24. Name and Signature:	25. Date	26. Time	27. Comments:
24a. Analyzed By:			Please email results to <a href="mailto:dragos.balota@cardno.com">dragos.balota@cardno.com</a>
24b. Analyzed By:			
24c. QC By:			

## APPENDIX B

### PCB ANALYTICAL RESULTS

**ANALYTICAL REPORT for PCBs**

Project Information	Batch Information	Client Information
NYE Project No.: 42776 Client Project No.: See Comments Street: 750 Baychester Ave  City: Bronx, NY	Batch No.: C6089 Field Tech: Client Total Samples: 3 Date Sampled: 4/22/2015 Date Received: 4/22/2015 Date Analyzed: 4/22/2015 Date Reported: 4/23/2015	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. C6089-1
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: X455 / Z214DB.6724

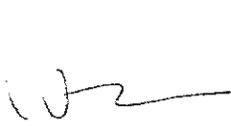
**Lab. Certification**

ELAP #: 11510

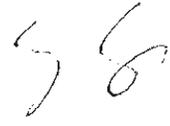
**Testing Method**

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.: 42776 Client Project No.: See Comments Street: 750 Baychester Ave  City: Bronx, NY	Batch No.: C6089 Field Tech: Client Total Samples: 3 Date Sampled: 4/22/2015 Date Received: 4/22/2015 Date Analyzed: 4/22/2015 Date Reported: 4/23/2015	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. C6089-2
Sample Location: Gymnasium, Wood Floor	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: X455 / Z214DB.6724

**Lab. Certification**

ELAP #: 11510

**Testing Method**

GC/ECD

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

  
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**ANALYTICAL REPORT for PCBs**

Project Information	Batch Information	Client Information
NYE Project No.: 42776 Client Project No.: See Comments Street: 750 Baychester Ave  City: Bronx, NY	Batch No.: C6089 Field Tech: Client Total Samples: 3 Date Sampled: 4/22/2015 Date Received: 4/22/2015 Date Analyzed: 4/22/2015 Date Reported: 4/23/2015	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. C6089-3
Sample Location: Gymnasium, Wood Floor	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: X455 / Z214DB.6724

**Lab. Certification**

ELAP #: 11510

**Testing Method**

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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: 11516

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:

**Quantitative Testing**

TCLP

EPA 131E

**Polychlorinated Biphenyls**

PCB-1016

PCB-1221

PCB-1232

PCB-1242

PCB-1248

PCB-1254

PCB-1260

EPA

EPA

EPA

EPA

EPA 8062A

EPA 8062A

EPA 8062A

**Sample Preparation Methods**

EPA 3050C



Serial No.: 50669

Products of the New York State Department of Health. Certificates are valid only at the address shown, must be conspicuously posted, and are printed on security paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (810) 485-5570 to verify the laboratory's accreditation status.

**APPENDIX D**

**NYC DOE WORK ORDER REQUEST**

Facility: DSF DIVISION OF SCHOOL FACILITIES  
 Unit : X Project :  
 W/O Type: CO Task Pri: 04 Tsk Dspln: H  
 Planner : MDELMON2 DELMONICO  
 W/O Title : 75/11X455/ INSPECT / REMOVE GYM LIGH  
 W/O Task Title: 75/11X455/ PERFORM PCB WIPE TEST  
 Written To : HARRY S. TRUMAN HS - X  
 Completed By:

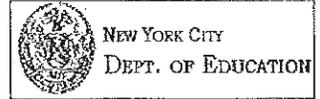


6724

**Work Order Package**

00573277 04

Rpt : TIPMC11  
 Date: 04/22/2015



**Work Order Task Written To**

Facility : DSF	Unit : X	Op Sys : GEO-11
Division : ABLDG X455	Area : ISC1	Sys/Cls: X455
Equipment : ABLDG X455	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: NFER5156	NICANOR FERNANDEZ	
Location : X05 14100150 000001 750 BAYCHESTER AV, BRONX, NY 10475		
Cost Centr: G839	Activity :	User Def:
Percentage: 100.000	Acct No. : GL	

**Work Order Task Instructions**

PERFORM PCB WIPE TEST.  
 HIGH DENSITY SODIUM LIGHT.  
 LOC: GYM. 1 LAMP CUSTODIAN REPORTS LIGHT SMOKED.  
 GYM IS 25 FT HIGH LIFT ON SITE.  
 Custodian MICHAEL DISTEFANO 718-320-0039  
 \*\*\*\*\*  
 ASSIGNED TO ATC ON 4/22/15

**Completion Comments on Work Performed**

Completion Comments Required : N

Comments:

Comments:

Comments: