

April 9, 2014

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
P.S. 308K
Cardno ATC Project: No. 42672.4490
Work Order No. 00533270 03**

Dear Mr. Orlan:

Cardno ATC was retained by NYC-DOE to perform a limited PCB wipe sampling inspection at K308 located at 616 Quincy Street, Brooklyn, NY 11221. The inspection was performed by Mr. Sydney Williams on April 8, 2014 and it was limited to wipe samples collection and analysis within Room #169 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 #169 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 #169 | Floor- 12x12 beige VFT (x=12.0, y=12.0) | Gauze Pad w/ deionized water | 0.03 | <0.03 |
| 03 | Room #169 | Metal Storage Cabinet (x=12.0, y=12.0) | Gauze Pad w/ hexane or reagent acetone | 0.03 | <0.03 |

CONCLUSIONS

Wipe samples obtained from cabinet and floor within Room #169 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

PROJECT INFORMATION

| | | | |
|------------------------------|---|--|--|
| 1. Client: NYC-DOE | 2. Project Name: K308 | 3a. ATC Project No.: 42672.4490 | 4a. Project Manager: Dragos Balota |
| | 2a. Project Address: 676 QUINCY ST. BKN | 3b. Task No.: 0001 | 4b. Inspector: Sydney Williams |
| 5. Date: 4-8-14 | 6. Building Name: 12308 | 8. Turnaround Time: RUSH (6 hours or less) | |
| | 7. Location: Room # 169 | 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) |
|--|----------------|--------------|-----------------------------|-----------------------------------|---------------------------|-------------------------------------|-------------------------------|-----------------------------------|
| 1 | | 169 | BLANK | | Gauze Pad w/ Hexane | | 30g | 230g |
| 2 | | 169 | LANE BEIGE VINYL TILE FLOOR | X - 12'0" Y - 12'0" | GAUZE PAD WITH DEON WATER | 100 | 0.03 | 20.03 |
| 3 | | 169 | METAL STORAGE CABINET TOP | X - 12'0" Y - 12'0" | GAUZE PAD WITH HEXANE | 100 | 0.03 | 20.03 |
| 2141067 | | | | | | | | |
|  C 3 5 4 2 | | | | | | | | |

CHAIN OF CUSTODY

| 17. Relinquished By | 18. Date | 19. Time | 20. Received By | 21. Date | 22. Time | 23. Method of Submittal |
|---------------------------|---------------|----------|--------------------|---------------|-------------|---|
| I. Sydney Williams | 4-8-14 | | WAS S. Crew | 4/8/14 | 1300 | 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: Please email results to dragos.balota@cardno.com |
| 24a. Analyzed By: | | | |
| 24b. Analyzed By: | | | |
| 24c. QC By: | | | |

APPENDIX B

PCB ANALYTICAL RESULTS

CLIENT: Cardno ATC
 104 E. 25 St. 10th fl.
 New York, NY 10011

REPORT NO. 2141067
PROJECT NO. 39961

PROJECT: K308 – 42672.4490
 616 Quincy Street, Brooklyn NY

SAMPLED: 04/08/14
RECEIVED: 04/08/14
ANALYZED: 04/08/14
REPORTED: 04/09/14

ANALYTICAL REPORT

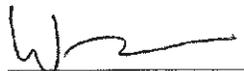
PCB WIPE

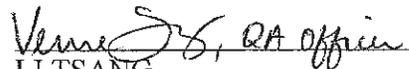
GC/ECD (EPA METHOD 8082A/3550C)

COMPOSITED SAMPLE ID: 01
 MATRIX: SURFACE WIPE
 SAMPLE LOCATION: BLANK

BATCH NO.: C3542-1

| TYPE OF PCB | CAS NO. | RESULT (ug) | MINIMUM DETECTION LIMIT (ug) |
|-------------|------------|-------------|------------------------------|
| 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 |


 NICOLE CHEUNG
 CHEMIST


 LI TSANG
 LABORATORY DIRECTOR

The report relates only to the items tested, as received by the laboratory. This report cannot be used in part and may only be used in full with this laboratory's approval. This report must not be used in any way to claim product endorsement by New York Environmental and ELAP of NYSDOH.

CLIENT: Cardno ATC
104 E. 25 St. 10th fl.
New York, NY 10011

REPORT NO. 2141067
PROJECT NO. 39961

PROJECT: K308 – 42672.4490
616 Quincy Street, Brooklyn NY

SAMPLED: 04/08/14
RECEIVED: 04/08/14
ANALYZED: 04/08/14
REPORTED: 04/09/14

ANALYTICAL REPORT

PCB WIPE
GC/ECD (EPA METHOD 8082A/3550C)

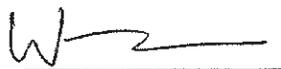
COMPOSITED SAMPLE ID: 02

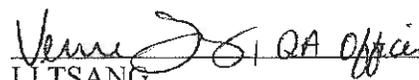
BATCH NO.: C3542-2

MATRIX: SURFACE WIPE

SAMPLE LOCATION: Room 169 (12x12 Beige Vinyl Floor Tile)

| TYPE OF PCB | CAS NO. | RESULT (ug/cm ²) | MINIMUM DETECTION LIMIT (ug/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 |


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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-1018

EPA 8082A

PCB-1221

EPA 8082A

PCB-1232

EPA 8082A

PCB-1242

EPA 8082A

PCB-1248

EPA 8082A

PCB-1254

EPA 8082A

PCB-1260

EPA 8082A

Sample Preparation Methods

EPA 3550C

STATE OF NEW YORK
DEPARTMENT OF HEALTH

Serial No.: 50889

Property of the New York State Department of Health. Certificates are valid only if the seal shown, must be conspicuously posted, and are printed on secure paper. Continued accreditation depends on successful ongoing participation in the Program. Consumers are urged to call (516) 485-6670 to verify the 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 : 75/16K308/ REMOVE & REPLACE SMOKING
 W/O Task Title: 75/16K308/ PREFORM PCB WIPE TEST (S
 Written To : P.S. 308 - BROOKLYN
 Completed By:

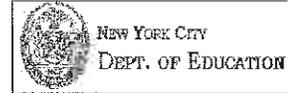


4490

Work Order Package

00533270 03

Rpt : TIPMC11
 Date: 04/08/2014



Page: 1

Work Order Task Written To

| | | |
|--|--------------------------|---------------------|
| Facility : DSF | Unit : K | Op Sys : GEO-16 |
| Division : ABLDG K308 | Area : ISC4 | Sys/Cls: K308 |
| Equipment : ABLDG K308 | Component: | |
| Work Item : | Eqt. List: | Ops Review Req'd: N |
| Equip. Tag: | Alt: | |
| UTC : | Tbl/Brkdnw: (Past 12 mo) | |
| Catalog ID: | Job Type : ET UCR: GN14 | |
| Client/Act: TRAM6608 | TREVOR RAMPERSAD | |
| Location : K01 63000001 000001 616 QUINCY ST, BROOKLYN, NY 11221 | | |
| Cost Centr: G839 | Activity : | User Def: |
| Percentage: 100.000 | Acct No. : GL | |

Work Order Task Instructions

PREFORM PCB WIPE TEST (SMOKING BALLAST)
 IN ROOM 169
 Custodian JOSEPH REILLY 718-443-3632

 ATC WILL COLLECT PCB WIPES 04/08/14.

Completion Comments on Work Performed

Completion Comments Required : N

Comments:

Comments:

Comments:

Continued on Additional Sheets? : _____