

October 23, 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
I.S. 239K
Cardno ATC Project: No. Z214AA-0797
Work Order No. 00590822 02**

Dear Mr. Orlan:

Cardno ATC was retained by NYC-DOE to perform a limited PCB wipe sampling inspection at K239 located at 2401 Neptune Avenue, Brooklyn, NY 11224. The inspection was performed by Mr. Ricardo Vilchez on October 22, 2015 and it was limited to wipe samples collection and analysis within Room #101 to determine if any surface was contaminated with PCB's due to smoking condition produced by unit ventilator.

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 five (5) samples (four surface samples and one blank) within Room #101 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

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 #101	Exterior casing of unit ventilator (no stains found)	Gauze Pad w/ hexane or reagent acetone	0.03	<0.03
03	Room #101	Interior casing of unit ventilator (stained area)	Gauze Pad w/ hexane or reagent acetone	0.03	<0.03
04	Room #101	Unit ventilator motor (stained area)	Gauze Pad w/ hexane or reagent acetone	0.03	93.3
05	Room #101	Hardwood floor, in front of unit ventilator (no stains found)	Gauze Pad w/ deionized water	0.03	<0.03

CONCLUSIONS

Wipe sample obtained from stained area on unit ventilator motor within Room #101 show PCB's concentrations to be above guideline level of 10 ug/cm². All other samples were determined to have concentrations 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- Laboratory Certifications
C- NYC DOE Work Order Request

APPENDIX A

PCB DATA AND CHAIN OF CUSTODY FORMS

44057

PCB WIPE SAMPLING COC

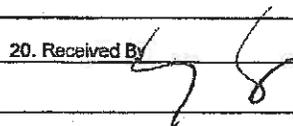
PROJECT INFORMATION

1. Client: NYC-DOE		2. Project Name: IS-239K	3a. ATC Project No.: 42672 Z214AA0797	4a. Project Manager: Dragos Balota
5. Date: 10-22-15		6. Building Name:	3b. Task No.: 0001	4b. Inspector: Ricardo Vilchez
7. Location: Room # 101		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)
101-01		101	BLANK	+	Gauze Pad w/ Hexane	+		< 3.00
101-02		101	FAN MOTOR UNIT EXTERIOR CASING TOP, METAL	X → 17' Y → 15'	GAUZE PAD w/HEXANE	100	0.03	< 0.03
101-03		101	FAN MOTOR UNIT INTERIOR CASING, FROM STAIN, METAL	X → 17' Y → 15'	GAUZE PAD w/HEXANE	100	0.03	93.3
101-04		101	FAN MOTOR UNIT INTERIOR CASING, BOTTOM OF MOTOR, METAL	X → 17' Y → 15'	GAUZE PAD w/HEXANE	100	0.03	< 0.03
101-05		101	HARDWOOD FLOOR (POLYURETHANE FINISH)	X → 17' Y → 14'	GAUZE PAD w/ DEION WATER	100	0.03	< 0.03
 C 7 0 9 6								

CHAIN OF CUSTODY

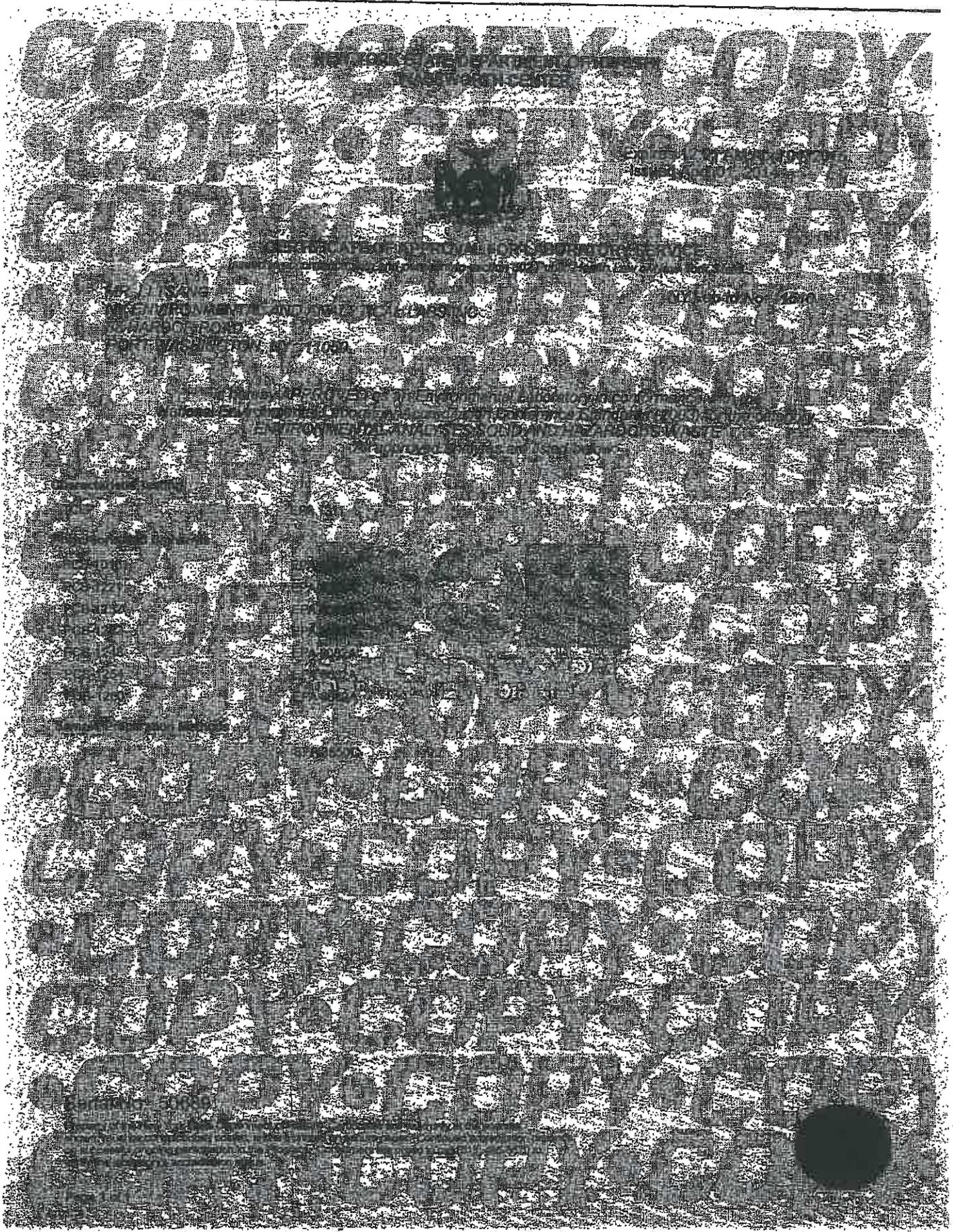
17. Relinquished By I. RICARDO VILCHEZ	18. Date 10-22-15	19. Time 1840	20. Received By 	21. Date 10-22-15	22. Time 1840	23. Method of Submittal Field <input checked="" type="checkbox"/> Walk In <input type="checkbox"/> US Mail <input type="checkbox"/> Fed-Ex <input type="checkbox"/> Other <input type="checkbox"/>
II.						
III.						

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

LABOARTORY CERTIFICATIONS



APPENDIX C

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 : DSCANNA SCANNAPIECO
 W/O Title : 75/21K239/ PERFORM AIR QUALITY TESTI
 W/O Task Title: 75/21K239/ TEST OIL FOR PCB.
 Written To : I.S. 239 - BROOKLYN
 Completed By:

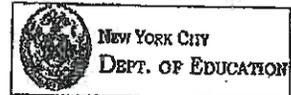


0797

Work Order Package

00590822 02

Rpt : TIPMC11
Date: 10/22/2015



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Work Order Task Written To

Facility : DSF	Unit : K	Op Sys : GEO-21
Division :	Area : ISC5	Sys/Cls: K239
Equipment : ABLDG K239	Component:	
Work Item :	Eqt. List:	Ops Review Req'd: N
Equip. Tag:	Alt:	
UTC :	Tbl/Brkdwn: (Past 12 mo)	
Catalog ID:	Job Type : CO UCR: GN16	
Client/Act: KCRI8357	KEVIN CRIBBIN	
Location : K06 96500140 000001 2401 NEPTUNE AV, BROOKLYN, NY 11224	Activity :	User Def:
Cost Cntr: G839	Acct No. : GL	
Percentage: 100.000		

Work Order Task Instructions

IN ROOM #101 TEST OIL FOR PCB, SCHOOL CE FOUND UNIVENT
 MOTOR SMOKING.
 CUSTODIAN: D. LACCARINO 718-946-4076.

 BERNIE NEEDS THIS TO BE TESTED ASAP FOR PCB IN OIL 10/22/15.

Completion Comments on Work Performed

Completion Comments Required : N

Comments:

Comments:

Comments:

Continued on Additional Sheets? :