RJB ENVIRONMENTAL, INC.

January 6, 2020

Mr. Charles Yahara, C.E.F.M.
C.M.C. Special Services School District
148 Crest Haven Road
Cape May Court House, NJ 08210

Re: Environmental Monitoring of the Removal of Mercury Rubberized Padding
Ocean Academy
148 Crest Haven Road
Cape May Court House, NJ 08210
RJB Project #: 2019065-01

Dear Mr. Yahara:

RJB Environmental, Inc., (RJB) was contracted by C.M.C. Special Services School District to provide air monitoring at the commencement and completion of the project for the removal of mercury containing padding from a padded room. The padded room was located adjacent to the gymnasium, at the Ocean Academy located at 148 Crest Haven Road in Cape May Court House, New Jersey.

The Remediation Contractor was AbateTech, Inc., of Lumberton, New Jersey, who performed the mercury remedial work between December 20 and 31, 2019. All mercury padding waste was containerized in a lined and covered dumpster and transported as a hazardous waste. Copies of waste manifests will be part of the Contractor's close-out report that will identify the location and waste transporter. The project air monitoring services for this project were performed by Troy Ray of RJB Environmental, Inc.

Remediation Scope of Work

The Contractor removed the padding from the small room and cut it into sections that would be accepted by the disposal facility. Underlying support materials, such as plywood, were also removed as part of the project.

The site preparation for the project consisted of the isolation of the work area for abatement as a full containment, included the installation of two (2) layers of six (6) mil polyethylene sheeting at locations leading to the adjacent hallway. A single layer of fire-retardant polyethylene sheeting was installed as a false ceiling and critical barriers were installed to the roof deck around the room. The work area was placed under negative pressure utilizing Air Filtration Devices (AFDs) equipped with pleated charcoal filters and High Efficiency Particulate Air (HEPA) filters exhausted to the building exterior. A three (3) stage personnel decontamination unit was constructed in the hallway from the gymnasium, which consisted of a clean, a shower, and an equipment room. Waste was transported from the decontamination unit to the exterior of the gymnasium, and into the dumpster.

The remediation crew wore full faced air purifying respirators with HEPA/Mercury filter canisters as well as "Tyvek®" style disposable coveralls and neoprene rubber gloves throughout the flooring removal and cleanup.

Project Monitoring

RJB performed perimeter and inside work area air measurements for mercury vapor, visible inspections of the work areas, and the visual review of engineering controls and negative pressure monitoring devices. Monitoring was performed after the work area was prepared, on December 23, 2019, and again on the date of clearance testing, December 26, 2019. Air monitoring was performed at locations within the work area, and within adjacent spaces outside of the work area, including the gymnasium, physical therapy room office, toy closet and outside the building. On December 26, 2019, monitoring was performed in the work area to determine if post remediation levels, using the portable Jerome mercury vapor analyzer, were acceptable to start clearance testing using NIOSH Method 6009.

RJB's monitoring services for the project consisted of perimeter air monitoring using a "Jerome®" J505 Mercury Vapor Analyzer to evaluate mercury vapor levels. In summary, monitoring revealed that mercury vapor levels within the work area dropped significantly as the mercury padding was removed. The use of negative pressure engineering controls prevented elevations in the adjoining spaces.

On December 26, 2019, a visual inspection was performed to verify that all materials were removed and air monitoring was performed within the work area, after the completion of the cleaning and HEPA-vacuuming, was performed to determine if further cleaning was needed. The AFD was shut off to record the ambient mercury level. Results of the air measurement in the work area was 0.03 $\mu g/m^3$, and in the gymnasium 0.00 $\mu g/m^3$. The measurements were below 0.80 $\mu g/m^3$, the acceptable level of exposure currently established by the New Jersey Department of Health. RJB collected two (2) clearance samples in accordance with NIOSH 6009, using pre-calibrated battery operated sampling pumps and laboratory provided sampling media. Following sample collection, pumps were post calibrated and samples delivered to EMSL Analytical, Inc., in Cinnaminson, New Jersey. On December 30, 2019, the laboratory issued the report of clearance testing, with no mercury detected. The detection limit was 0.17 $\mu g/m^3$ for the analyses. The clearance criteria was met and the Contractor demobilized the work area on December 31, 2019.

Should you have any questions or require additional information, please contact the undersigned at your earliest convenience.

Respectfully,
RJB ENVIRONMENTAL, INC.

James Frisbee, CIH
Vice President

Company:\Projects\Client\C.M.C Special Services School District

Appendix 1

Mercury Vapor Measurement Data
Laboratory Air Clearance Report and Chain of Custody

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone: (856) 303-2500 Fax: (856) 858-4571 Email: EnvChemistry2@emsl.com

Attn: **James Frisbee**
RJB Environmental
615 Prospect Avenue
Morrisville, PA 19067
Phone: (609) 203-3115
Fax:

12/30/2019

The following analytical report covers the analysis performed on samples submitted to EMSL Analytical, Inc. on 12/30/2019. The results are tabulated on the attached data pages for the following client designated project:

C.M.C. Special Services School District Project #2019065-01
Mercury Padding Removal, Ocean Academy, Padded Room @Gym

The reference number for these samples is EMSL Order #011916183. Please use this reference when calling about these samples. If you have any questions, please do not hesitate to contact me at (856) 303-2500.

Approved By:

Phillip Worby, Environmental Chemistry Laboratory Director

AIHA LAP, LLC
ACCREDITED LABORATORY
INDUSTRIAL HYGIENE
ISO/IEC 17025:2005
www.aihaaccreditedlabs.org

AIHA-LAP, LLC-IHLAP Lab # 100194
NELAP Certification: NJ 03036; NY 10872

EMSL Analytical, Inc.
200 Route 130 North, Cinnaminson, NJ 08077
Phone/Fax: (856) 303-2500 / (856) 858-4571
http://www.EMSL.com EnvChemistry2@emsl.com

EMSL Order: 011916183
CustomerID: RJBE42
CustomerPO:
ProjectID:

Attn: **James Frisbee**
RJB Environmental
615 Prospect Avenue
Morrisville, PA 19067

Phone: (609) 203-3115
Fax:
Received: 12/30/19 9:00 AM

Project: **C.M.C. Special Services School District Project #2019065-01 Mercury Padding Removal, Ocean Academy, Padded Room @Gym**

Analytical Results

Client Sample Description 12320 Lot# 1226-01 Inside work area — ***Collected:*** 12/26/2019 — ***Lab ID:*** *011916183-0001*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
NIOSH 6009	Mercury	ND	0.00017	mg/m³	12/30/2019 JS	12/30/2019 JS

Client Sample Description 12320 Lot# 1226-02 Inside work area — ***Collected:*** 12/26/2019 — ***Lab ID:*** *011916183-0002*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
NIOSH 6009	Mercury	ND	0.00016	mg/m³	12/30/2019 JS	12/30/2019 JS

Client Sample Description 12320 Lot# 1226-03 Blank — ***Collected:*** 12/26/2019 — ***Lab ID:*** *011916183-0003*

Method	*Parameter*	*Result*	*RL*	*Units*	*Prep Date & Analyst*	*Analysis Date & Analyst*
METALS						
NIOSH 6009	Mercury	ND	0.000010	mg/tube	12/30/2019 JS	12/30/2019 JS

Definitions:
MDL - method detection limit
J - Result was below the reporting limit, but at or above the MDL
ND - indicates that the analyte was not detected at the reporting limit
RL - Reporting Limit (Analytical)
D - Dilution

AIR SAMPLE DATA COLLECTION AND ANALYSIS 011916183
METHOD: NIOSH 6009 – Mercury

Client: C.M.C. Special Services School District	Sampled By: Troy Bray		Date: 12/26/19
Project #: 2019065-01	Released To:		Date: 12/27/19 7:00p
Project Name: Mercury Padding Removal	Analyzed By:		Date: 12/30 9am
Building/Location: Ocean Academy, Padded Room @ Gym	Turn Around Time	☐ 6 Hr ☐ 12Hr ☒ 24 Hr ☐ 48 Hour	

	SAMPLE IDENTIFICATION	SAMPLE LOCATION OR WORKER NAME	TIME START	TIME END	TIME TOTAL	FLOW RATE S	FLOW RATE E	FLOW RATE A	TOTAL VOLUME	RESULTS UNITS: mg/m³
①	12320 Lot# 1226-01	Inside Work Area	1102	302	240	0.25	0.25	0.25	60.2	
②	12320 Lot# 1226-02	Inside Work Area	1105	305	240	0.25	0.25	0.25	61.1	
③	12320 Lot# 1226-03	Blank	~~0~~	~~0~~	—				→	

Form – Mercury in Air Sample Data Collection Sheet

RECEIVED
EMSL
CINNAMINSON, NJ
2019 DEC 27 P 7:03

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Email for signature 12/30 MF

RJB ENVIRONMENTAL, INC.
615 Prospect Avenue
Morrisville, PA 19067
Phone: 267-991-9212 Fax: 267-799-4443

3RW

RJB ENVIRONMENTAL, INC.

Client : C.M.C. Special Services School District
Project : Mercury in Air Monitoring
Building : Ocean Academy Cape May Court House, NJ

Date : 12-23-19
Technician : TROY RAY
Project # :2019065-01

Jerome J505 Mercury Analyzer Measurements

Monitoring Location ID	Times AM		PM	Locations	Mercury ug/m³ AM		PM
01	730	1230		Courtyard - outside	0.11	0.04	
02	735	1232		MAIN GYM INTERIOR	0.17	0.24	
03	740	1234		Physical Therapy Rm office	0.18	0.40	
04	745	1236		TOY CLOSET	0.24	0.30	
05	750	1238		Inside work AREA - PADDED ROOM	2.84	0.91	
06							

Manometer Work Area Negative Pressure: _____ **Contractor Work Activities** _____
Manometer Work Area Negative Pressure: _____ **Contractor Work Activities** _____

RJB ENVIRONMENTAL, INC.

Client : C.M.C. Special Services School District
Project : Mercury in Air Monitoring
Building : Ocean Academy Cape May Court House, NJ

Date : 12-26-19
Technician : TROY Ray
Project # : 2019065-01

Jerome J505 Mercury Analyzer Measurements

Monitoring Location ID	Times AM		PM	Locations	Mercury ug/m³ AM		PM
01	1045			Inside work area / central	0.03		
02	1050			MAIN GYM AREA	0.00		
03							
04							
05							
06							

Manometer Work Area Negative Pressure:_____ **Contractor Work Activities**_____
Manometer Work Area Negative Pressure:_____ **Contractor Work Activities**_____

Appendix 2

Daily Log Notes

Daily Project Log

Client: C.M.C. Special Services School District	**Date:** 12-23-19
Project #: 2019065-01	**Technician:** TROY A. RAY
Project Name: MCFS Abatement	**Building/Location:** Ocean Academy

Time	Activity
	Arrive on site to conduct project monitoring during the Removal of wall and floor padding associated with Mercury (Hg) contamination materials.
	Meet with site supervisor and crew to discuss scope of work to be done during shift! Notify crew to seal exterior vintvents of classrooms where AFD exhaust out into courtyard/playground.
	Set up calibrate Jerome measurement device to collect initial readings for documentation purposes.
	Conduct visual inspection to identify work activities & practices and progress during gross removal activity.
	Set up calibrate Jerome measurement device to collect readings during gross removal activity for documentation purposes
	Collect equipment and conduct visual inspection of work practices and work progress
	Exercise complete

RJB ENVIRONMENTAL, INC.
615 Prospect Avenue
Morrisville, PA 19067
Phone: 267-991-9212 Fax: 267-799-4443

Daily Project Log

Client: C.M.C. Special Services School District	**Date:** 12-26-19
Project #: 2019065-01	**Technician:** Troy Ray
Project Name: MCFS Abatement	**Building/Location:** Ocean Academy

Time	Activity
945	AMW on site to conduct clearance inspections and testing following the MCFS Abatement project at Cape May Courthouse Special Services School District.
1035	collect Jerome readings to confirm safe levels inside of the designated work area.
1045	Calibrate pumps for final clearance testing inside of work area
1100	Setup pumps for clearance testing inside work area.
350	collect samples and equipment Calibrate pumps for final clearance purposes
400	Proceed to drop off samples at lab

RJB ENVIRONMENTAL, INC.
615 Prospect Avenue
Morrisville, PA 19067
Phone: 267-991-9212 Fax: 267-799-4443

Appendix 3

Equipment Calibration

INSTRUMENT CALIBRATION REPORT

Pine Environmental Services LLC
92 North Main St, Building 20
Windsor, NJ 08561
Toll-free: (800) 301-9663

Pine Environmental Services, Inc.

Instrument ID 20502
Description Jerome J505
Calibrated 12/16/2019 8:34:50AM

Manufacturer Arizona
Model Number J505
Serial Number/ Lot Number 50500020
Location New Jersey
Department

State Certified
Status Pass
Temp °C 20.8
Humidity % 22

Calibration Specifications

Group # 1
Group Name Warmup, Purge, and Sample Test
Test Performed: Yes **As Found Result: Pass** **As Left Result: Pass**

Test Instruments Used During the Calibration

Test Standard ID	Description	Manufacturer	Model Number	Serial Number / Lot Number	(As Of Cal Entry Date) Next Cal Date / Last Cal Date/ Expiration Date Opened Date

Notes about this calibration

Calibration Result Calibration Successful
Who Calibrated Martin Konn

All instruments are calibrated by Pine Environmental Services LLC according to the manufacturer's specifications, but it is the customer's responsibility to calibrate and maintain this unit in accordance with the manufacturer's specifications and/or the customer's own specific needs.

Notify Pine Environmental Services LLC of any defect within 24 hours of receipt of equipment
Please call 800-301-9663 for Technical Assistance

3375 N. Delaware Street, Chandler, AZ 85225
800.528.7411 | (f) 602.281.1745 | azic.com

Certification of Instrument Calibration

Pine Environmental Services LLC
92 N. Main St. Bldg 20
Windsor, NJ 08561

RMA #

This is to certify that the Jerome **J505-0001** Atomic Fluorescence Mercury Analyzer, Serial Number **50500020**, was calibrated with standard units traceable to NIST.

Calibration Status as Received: **Out of Calibration**

	Actual	Calibration Gas	Allowable Range
Incoming:	18.56 µg/m3 Hg 1.08 % RSD	25.00 µg/m3 Hg	22.50 - 27.50 µg/m3 Hg <5%
Outgoing:	24.85 µg/m3 Hg 0.68 % RSD	25.00 µg/m3 Hg	23.75 - 26.25 µg/m3 Hg <3%
Calibration Verification:	µg/m3 Hg % RSD	0.300 µg/m3 Hg	0.255 - 0.345 µg/m3 Hg <15%

Calibration Status as Left: **In Calibration**

Estimated Uncertainty of Calibration System: 3.5%

Calibration Date: 15-Nov-2019 Recalibration Date: 14-Nov-2020

Temperature °F: 73.10 % Relative Humidity: 29.40

Approved By: Jackie Kreitlow

Title: Jackie Kreitlow - Quality Control Date Approved: 15-Nov-2019

Equipment Used:

Permeation Tube: S89-6 **NIST#:** ISO13265; 072958
Calibration Date: 17-Jan-2019 **Calibration Date Due:** 17-Jan-2020

DynaCalibrator: M-1998 **NIST#:** 19-2952
Calibration Date: 26-Apr-2019 **Calibration Date Due:** 25-Apr-2020

Digital Multimeter: 64070755 **NIST#:** 7003135
Calibration Date: 11-Apr-2019 **Calibration Date Due:** 11-Apr-2020

Mass Flow Controller: 54807 **NIST#:**236847
Calibration Date:6-Jul-19 **Calibration Date Due:** 6-Jul-20

Calibration Procedure Used: 730-0165

AMETEK Brookfield certifies that the above listed instrument meets or exceeds all published specifications and has been calibrated using standards whose accuracy is traceable to the NATIONAL INSTITUTE OF STANDARDS AND TECHNOLOGY within the limitations of the Institute's calibration services, or have been derived from accepted values of natural physical constants, or have been derived by the ratio type of self-calibration techniques.
Disclaimer: Any unauthorized adjustments, removal or breaking of QC seals, or other customer modifications on your Jerome Analyzer WILL VOID this factory calibration, because any of the above acts could affect the calibration and readings of the instrument. Further, AMETEK Brookfield WILL NOT be responsible for any liabilities created as a result of using the instrument after such adjustments, seal removal, or modifications.