



Keystone Academy Charter School  
4521 Longshore Avenue  
Philadelphia, Pennsylvania 19135

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## Asbestos Inspection Report

NOVEMBER 10, 2020

**PREPARED FOR:**

Keystone Academy Charter School  
4521 Longshore Avenue  
Philadelphia, PA 19135

Attn: Ms. Claudia Lyles

**PREPARED BY:**

The Vertex Companies, Inc.  
700 Turner Industrial Way  
Aston, Pennsylvania 19014  
PHONE 610.558.8902

**VERTEX Project No:** 65935

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## I. INTRODUCTION

The Vertex Companies, Inc. (VERTEX) was retained by Keystone Academy Charter Schools to perform a comprehensive asbestos inspection of the school located at 4521 Longshore Avenue in Philadelphia, Pennsylvania.

This inspection was conducted to confirm/dismiss the presence, locations and quantities of Asbestos Containing Materials (ACM) or Presumed Asbestos Containing Materials (PACM).

This survey was performed from September 8, 2020 through September 11, 2020 by US EPA AHERA Certified Asbestos Building Inspector, State of Pennsylvania Licensed Asbestos Inspector, and Philadelphia Asbestos Investigator Joseph Anello.

Bulk samples were submitted to and analyzed by EMSL Analytical, Inc. of Plymouth Meeting, Pennsylvania in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116 protocol utilizing Polarized Light Microscopy (PLM). EMSL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP #200699-0).

Note: Polarized Light Microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound (NOB) materials. Fiber size (both length & diameter) of NOBs is frequently very small limiting fiber detection by PLM optics. Fibers are also tightly bound in the matrix of NOBs obscuring their detection. The State of Pennsylvania does not require confirmatory TEM analysis of NOB samples with negative or "inconclusive" asbestos content by PLM. TEM analysis was not authorized by the client and was not included in the scope of services for this project.

## II. RESULTS

Results indicate that the following asbestos containing building materials were identified:

Location	Material Description	Estimated Quantity
Exterior stone façade adjacent to parking lot by basement steps	Remnant tar	10 LF

SF – Square Feet; EA – Each; LF – Linear Feet; CF – Cubic Feet

Note: The above material was abated by Plymouth Environmental Company, Inc. on October 30, 2020. VERTEX conducted air monitoring during the abatement. Our clearance letter is included attached to this report.

The following is a list of materials that were tested as part of this inspection and found to be non-asbestos containing (less than 1% asbestos containing):

1. 12" x 12" blue marble floor tile and associated yellow mastic
2. 12" x 12" green marble floor tile and associated yellow mastic
3. 12" x 12" yellow marble floor tile and associated yellow mastic
4. 12" x 12" beige marble floor tile and associated yellow mastic
5. Gray floor leveler
6. 4" gray cove base and associated yellow mastic
7. 2' x 4' textured ceiling tile
8. Drywall and associated joint compound
9. Plaster ceiling rough coat
10. Exterior mortar
11. Exterior stucco/EIFS
12. Exterior expansion caulk
13. Exterior window caulk
14. Exterior door caulk
15. Plaster skim and rough coat
16. Black stone lab tabletops
17. Cinderblock

Additional documentation can be found in the attached laboratory report and asbestos material plan.

#### **RESTRICTIONS**

- No inspection/sampling was performed below finished grade or within confined spaces.
- The rubber membrane roof is not a suspect asbestos containing material and was not sampled as part of this investigation.

Additional documentation can be found in the attached laboratory report.

#### **III. SAMPLING METHODOLOGY**

Bulk samples were collected and analyzed in order to determine the identity of suspect materials and their composition. The purpose of the survey was to identify all accessible ACMs which may be impacted by future proposed demolition or renovation activities.

Bulk samples were grouped into homogenous sampling areas. A homogenous sampling area contains suspect asbestos materials that are uniform in texture, appearance, time of

installation, and is unlikely to consist of more than one type or formulation of material. Per AHERA protocol, if any sample within the homogenous sampling area has greater than 1% by weight, then the entire sampling area is assumed to contain asbestos.

Bulk samples were collected from both friable and non-friable suspect asbestos containing materials. Representative core samples of each material were collected by penetrating the material to its substrate. Each sample and sample location was incorporated into a sampling log and chain of custody for each sample was documented. All samples were placed in sealed containers and labeled with an identifying code.

Bulk samples were submitted to and analyzed by EMSL Analytical, Inc. of Plymouth Meeting, Pennsylvania in accordance with United States Environmental Protection Agency (USEPA) Method 600/R-93/116 protocol utilizing Polarized Light Microscopy (PLM). PLM is the reference method of analysis to demonstrate that presumed asbestos containing materials do not contain asbestos per OSHA's Construction Standard (29 CFR 1926.1101) and EPA's Asbestos Hazard Emergency Response Act (40 CFR 763, Subpart E). The detection limit of the PLM referenced method is one percent (1%) asbestos. EMSL is accredited through the National Voluntary Laboratory Accreditation Program (NVLAP #200699-0).

Polarized Light Microscopy (PLM) is not consistently reliable in detecting asbestos in floor coverings and similar non-friable organically bound (NOB) materials. Fiber size (both length & diameter) of NOBs is frequently very small limiting fiber detection by PLM optics. Fibers are also tightly bound in the matrix of NOBs obscuring their detection. The State of Pennsylvania does not require confirmatory TEM analysis of NOB samples with negative or "inconclusive" asbestos content by PLM. TEM analysis was not authorized by the client and was not included in the scope of services for this project.

#### **IV. LIMITATIONS AND SERVICE CONSTRAINTS**

Professional opinions presented in this report are based on information made available either by review of data provided by others or data gained by inspection personnel.

VERTEX affirms that data gathered and presented in this report was collected in an appropriate manner in accordance with generally accepted methods and practices. Conditions described in this report were observed at the time of the investigation, unless otherwise stated.

Exploratory demolition was performed in limited locations, to the extent feasible. Please see specific restrictions above.

Reasonable effort was made by inspection personnel to locate and sample suspect materials within the designated areas inspected. However, for any facility, the existence of unique or concealed ACMs and debris is a possibility. VERTEX does not warrant, guarantee or profess to have the ability to locate or identify all ACMs in a facility.

The intent of this report is to be used in planning for demolition or renovation activity. If ACMs are discovered during demolition or renovation related activities, these materials should be removed and disposed of in accordance with all local, state and federal regulations prior to any demolition or renovation related activities. Abatement of ACM must be performed by an accredited/certified/licensed asbestos-abatement contractor.

VERTEX analyzed only the substances, conditions, and locations described in the report at the time indicated. VERTEX retains the right to revise this report if new information is later discovered or made available.

The report must be presented in its entirety.

## **V. CONCLUSIONS AND RECOMMENDATIONS**

A summary table is provided in the attachments which include the samples collected, locations and analytical results. The laboratory reports are also attached.

Based on the sampling and analysis of suspect materials, ACMs were identified as noted on the table above.

**The asbestos containing exterior remnant tar was abated by Plymouth Environmental Company, Inc. on October 30, 2020. VERTEX conducted air monitoring during the abatement. Our clearance letter is included attached to this report. No further asbestos containing materials were identified from samples collected during this investigation.**

If additional suspect materials are discovered during demolition or renovation activities, VERTEX recommends collecting/analyzing samples of the materials for asbestos content prior to disturbance.

ACM material which will be impacted or disturbed must be removed prior to demolition or renovation activities by a licensed asbestos abatement contractor in accordance with all applicable asbestos regulations.

**APPENDIX A**  
**PLM BULK SAMPLE RESULTS**



# EMSL Analytical, Inc.

5221 Militia Hill Road Plymouth Meeting, PA 19462

Tel/Fax: (610) 828-3102 / (610) 828-3122

http://www.EMSL.com / plymouthmeetinglab@emsl.com

EMSL Order: 182002832

Customer ID: VRTX78

Customer PO:

Project ID:

**Attention:** Joseph Anello  
The Vertex Companies, Inc.  
700 Turner Way, Suite 105  
Aston, PA 19014

**Phone:** (609) 605-0359

**Fax:** (610) 558-8904

**Received Date:** 09/14/2020 4:15 PM

**Analysis Date:** 09/16/2020 - 09/17/2020

**Collected Date:**

**Project:** 65935 - Keystone Academy

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
1A-Floor Tile 182002832-0001	1st Floor Hall - 12"x12" Blue Marble Floor Tile, Yellow Mastic	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1A-Mastic 182002832-0001A	1st Floor Hall - 12"x12" Blue Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1B-Floor Tile 182002832-0002	3rd Floor Room 308 - 12"x12" Blue Marble Floor Tile, Yellow Mastic	Blue Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
1B-Mastic 182002832-0002A	3rd Floor Room 308 - 12"x12" Blue Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2A-Floor Tile 182002832-0003	2nd Floor Hall - 12"x12" Green Marble Floor Tile, Yellow Mastic	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2A-Mastic 182002832-0003A	2nd Floor Hall - 12"x12" Green Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2B-Floor Tile 182002832-0004	3rd Floor Room 301 - 12"x12" Green Marble Floor Tile, Yellow Mastic	Green Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
2B-Mastic 182002832-0004A	3rd Floor Room 301 - 12"x12" Green Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3A-Floor Tile 182002832-0005	1st Floor Hall - 12"x12" Yellow Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3A-Mastic 182002832-0005A	1st Floor Hall - 12"x12" Yellow Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3B-Floor Tile 182002832-0006	Cafeteria - 12"x12" Yellow Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
3B-Mastic 182002832-0006A	Cafeteria - 12"x12" Yellow Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4A-Floor Tile 182002832-0007	Cafeteria - 12"x12" Beige Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Initial report from: 09/17/2020 15:39:53





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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
4A-Mastic 182002832-0007A	Cafeteria - 12"x12" Beige Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4A-Leveler 182002832-0007B	Cafeteria - 12"x12" Beige Marble Floor Tile, Yellow Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4B-Floor Tile 182002832-0008	2nd Floor Electric Room - 12"x12" Beige Marble Floor Tile, Yellow Mastic	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4B-Mastic 182002832-0008A	2nd Floor Electric Room - 12"x12" Beige Marble Floor Tile, Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
4B-Leveler 182002832-0008B	2nd Floor Electric Room - 12"x12" Beige Marble Floor Tile, Yellow Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5A-Cove Base 182002832-0009	3rd Floor Electrical Closet - 4 Inch Gray Cove Base and Yellow Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5A-Mastic 182002832-0009A	3rd Floor Electrical Closet - 4 Inch Gray Cove Base and Yellow Mastic	Yellow Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5B-Cove Base 182002832-0010	1st Floor Electrical Closet - 4 Inch Gray Cove Base and Yellow Mastic	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
5B-Mastic 182002832-0010A	1st Floor Electrical Closet - 4 Inch Gray Cove Base and Yellow Mastic	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
6A 182002832-0011	3rd Floor Electrical Room - 2'x4' Textured Ceiling Tile	Gray/White Fibrous Homogeneous	70% Cellulose 20% Min. Wool	10% Non-fibrous (Other)	None Detected
6B 182002832-0012	2nd Floor Electrical Room - 2'x4' Textured Ceiling Tile	Gray/White Fibrous Homogeneous	50% Cellulose 40% Min. Wool	10% Non-fibrous (Other)	None Detected
6C 182002832-0013	1st Floor Electrical Room - 2'x4' Textured Ceiling Tile	Gray/White Fibrous Homogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (Other)	None Detected
6D 182002832-0014	Basement Storage - 2'x4' Textured Ceiling Tile	Gray Fibrous Homogeneous	60% Cellulose 30% Min. Wool	10% Non-fibrous (Other)	None Detected
7A-Composite 182002832-0015	Third-Floor Roof Access 301 - Drywall and Joint Compound	Brown/White Fibrous Heterogeneous	12% Cellulose 3% Glass	85% Non-fibrous (Other)	None Detected
7B-Composite 182002832-0016	Third-Floor Electrical Closet - Drywall and Joint Compound	Brown/White Fibrous Heterogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
7C-Composite 182002832-0017	Second-Floor New Electrical Closet - Drywall and Joint Compound	Brown/White Fibrous Heterogeneous	15% Cellulose 3% Glass	82% Non-fibrous (Other)	None Detected

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Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
7D-Composite 182002832-0018	Second-Floor Old Electrical Closet - Drywall and Joint Compound	Brown/White Fibrous Heterogeneous	12% Cellulose 3% Glass	85% Non-fibrous (Other)	None Detected
7E-Composite 182002832-0019	First-Floor New Electrical Closet - Drywall and Joint Compound	Brown/White Fibrous Heterogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
7F-Composite 182002832-0020	First-Floor Old Electrical Closet - Drywall and Joint Compound	Gray/White Non-Fibrous Heterogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
7G-Composite 182002832-0021	Basement Storage - Drywall and Joint Compound	Gray/White Non-Fibrous Heterogeneous	15% Cellulose 5% Glass	80% Non-fibrous (Other)	None Detected
8A 182002832-0022	Basement Storage - Plaster Ceiling Rough Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8B 182002832-0023	Basement Storage - Plaster Ceiling Rough Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
8C 182002832-0024	Basement Storage - Plaster Ceiling Rough Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
9A 182002832-0025	Front of Building - Exterior Remnant Tar Sealant From Overhand	Black Non-Fibrous Homogeneous		92% Non-fibrous (Other)	8% Chrysotile
9B 182002832-0026	Front of Building - Exterior Remnant Tar Sealant From Overhand				Positive Stop (Not Analyzed)
10A 182002832-0027	Front of Building - Exterior Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
10B 182002832-0028	Front of Building - Exterior Mortar	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11A 182002832-0029	Front Left - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11B 182002832-0030	Front Right - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11C 182002832-0031	Side - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11D 182002832-0032	Back Left - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11E 182002832-0033	Back Right - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
11F 182002832-0034	Right Side - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
11G 182002832-0035	Right Side - Exterior Stucco / EIFS	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12A 182002832-0036	Front - Exterior Expansion Caulk	Tan/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
12B 182002832-0037	Back - Exterior Expansion Caulk	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13A 182002832-0038	Front - Exterior Window Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
13B 182002832-0039	Side - Exterior Window Caulk	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14A 182002832-0040	Front - Exterior Door Caulk	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
14B 182002832-0041	Back - Exterior Door Caulk	Tan Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A-Skim Coat 182002832-0042	201 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15A-Rough Coat 182002832-0042A	201 - Plaster Skim and Rough Coat	Gray Non-Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
15B-Skim Coat 182002832-0043	205 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15B-Rough Coat 182002832-0043A	205 - Plaster Skim and Rough Coat	Gray Non-Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
15C-Skim Coat 182002832-0044	203 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15C-Rough Coat 182002832-0044A	203 - Plaster Skim and Rough Coat	Gray Non-Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
15D-Skim Coat 182002832-0045	101 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15D-Rough Coat 182002832-0045A	101 - Plaster Skim and Rough Coat	Gray Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
15E-Skim Coat 182002832-0046	105 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15E-Rough Coat 182002832-0046A	105 - Plaster Skim and Rough Coat	Gray Non-Fibrous Homogeneous	5% Hair	95% Non-fibrous (Other)	None Detected
15F-Skim Coat 182002832-0047	103 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15F-Rough Coat 182002832-0047A	103 - Plaster Skim and Rough Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

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EMSL Order: 182002832  
Customer ID: VRTX78  
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Project ID:

## Test Report: Asbestos Analysis of Bulk Materials via EPA 600/R-93/116 Method using Polarized Light Microscopy

Sample	Description	Appearance	Non-Asbestos		Asbestos
			% Fibrous	% Non-Fibrous	% Type
15G-Skim Coat <i>182002832-0048</i>	305 - Plaster Skim and Rough Coat	White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
15G-Rough Coat <i>182002832-0048A</i>	305 - Plaster Skim and Rough Coat	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16A <i>182002832-0049</i>	Science Lab 304 - Lab Table Tops	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
16B <i>182002832-0050</i>	Science Lab 304 - Lab Table Tops	Black Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17A <i>182002832-0051</i>	Basement - Block Walls	Gray/White Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected
17B <i>182002832-0052</i>	Basement - Block Walls	Gray Non-Fibrous Homogeneous		100% Non-fibrous (Other)	None Detected

Analyst(s) \_\_\_\_\_

Adam Gart (41)  
Daniel Denora (29)

Kevin Ream, Laboratory Manager  
or Other Approved Signatory

EMSL maintains liability limited to cost of analysis. Interpretation and use of test results are the responsibility of the client. This report relates only to the samples reported above, and may not be reproduced, except in full, without written approval by EMSL. EMSL bears no responsibility for sample collection activities or analytical method limitations. The report reflects the samples as received. Results are generated from the field sampling data (sampling volumes and areas, locations, etc.) provided by the client on the Chain of Custody. Samples are within quality control criteria and met method specifications unless otherwise noted. The above analyses were performed in general compliance with Appendix E to Subpart E of 40 CFR (previously EPA 600/M4-82-020 "Interim Method") but augmented with procedures outlined in the 1993 ("final") version of the method. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST or any agency of the federal government. Non-friable organically bound materials present a problem matrix and therefore EMSL recommends gravimetric reduction prior to analysis. Unless requested by the client, building materials manufactured with multiple layers (i.e. linoleum, wallboard, etc.) are reported as a single sample. Estimation of uncertainty is available on request.

Samples analyzed by EMSL Analytical, Inc. Plymouth Meeting, PA NVLAP Lab Code 200699-0, Philadelphia ALL-292, VA 3333000315, AIHA-LAP, LLC IHLAP #178659

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**APPENDIX B  
SITE PHOTOGRAPHS**

**Photographic Documentation  
4521 Longshore Avenue  
Philadelphia, Pennsylvania  
Project No. 65935**

**Photograph: 1**

**Description:**

Front entrance of new building



**Photograph: 2**

**Description:**

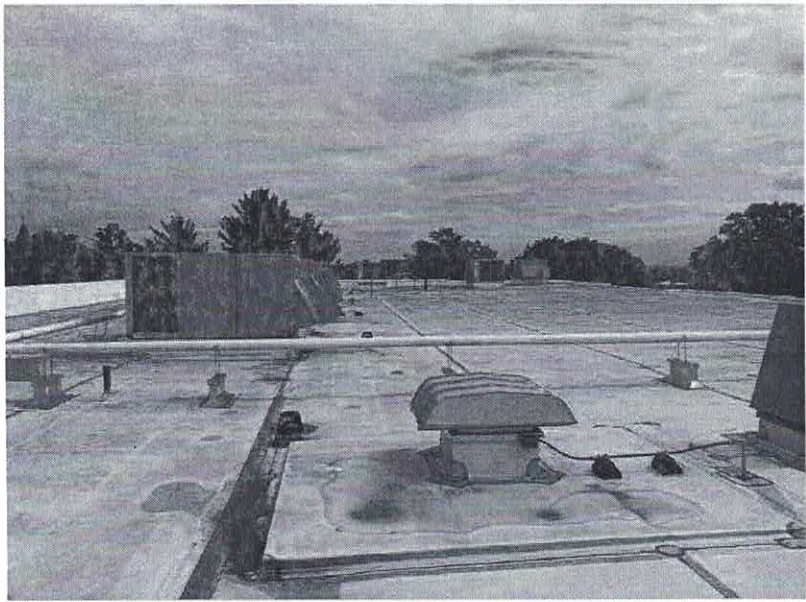
Old building



Photographic Documentation  
4521 Longshore Avenue  
Philadelphia, Pennsylvania  
Project No. 65935

**Photograph: 3****Description:**

Rubber roof membrane

**Photograph: 4****Description:**

Remnant tar abated  
October 30, 2020

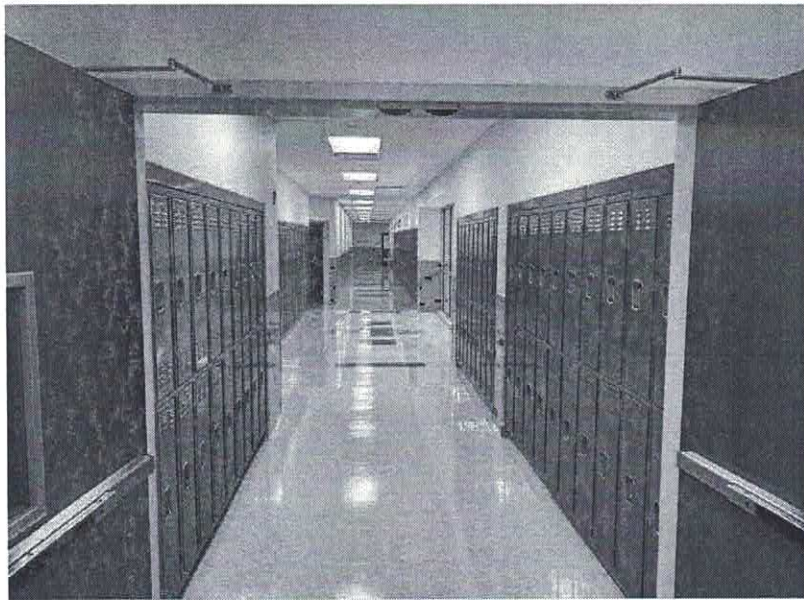


Photographic Documentation  
4521 Longshore Avenue  
Philadelphia, Pennsylvania  
Project No. 65935

**Photograph: 5**

**Description:**

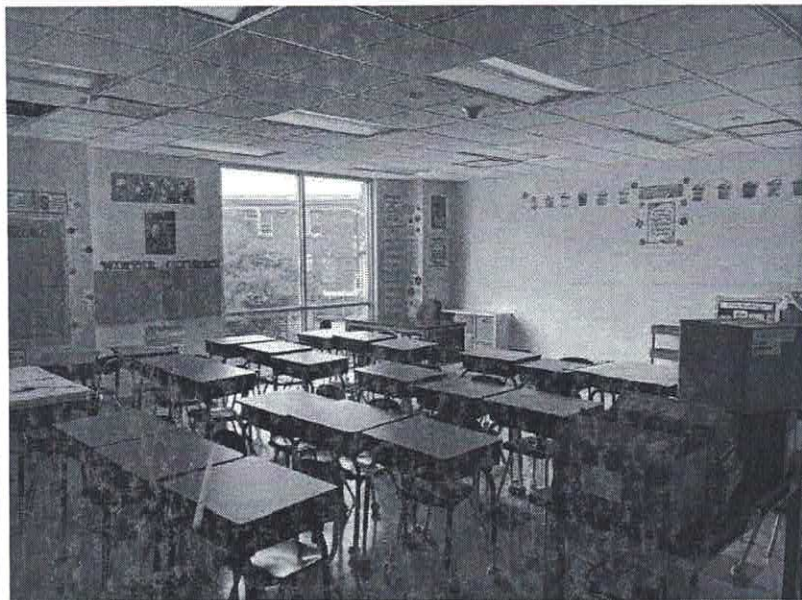
Typical hallway



**Photograph: 6**

**Description:**

Typical classroom



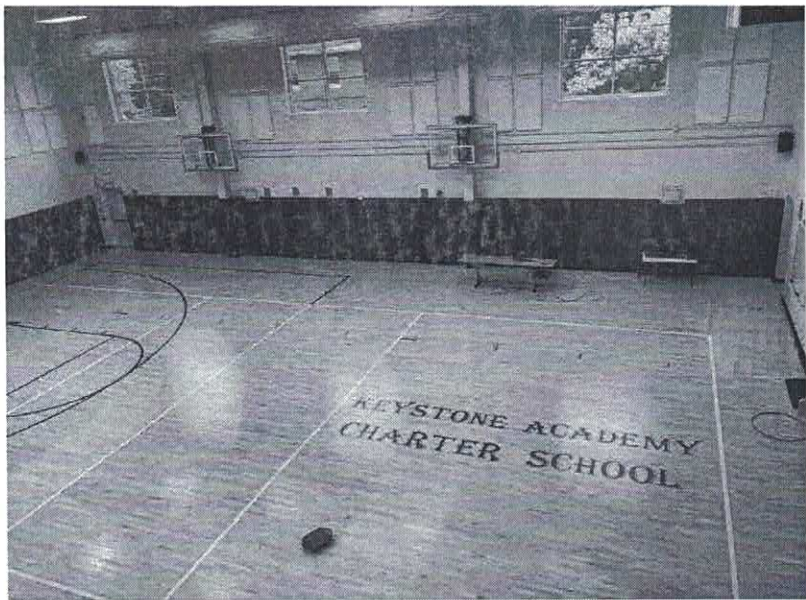


Photographic Documentation  
4521 Longshore Avenue  
Philadelphia, Pennsylvania  
Project No. 65935

**Photograph: 7**

**Description:**

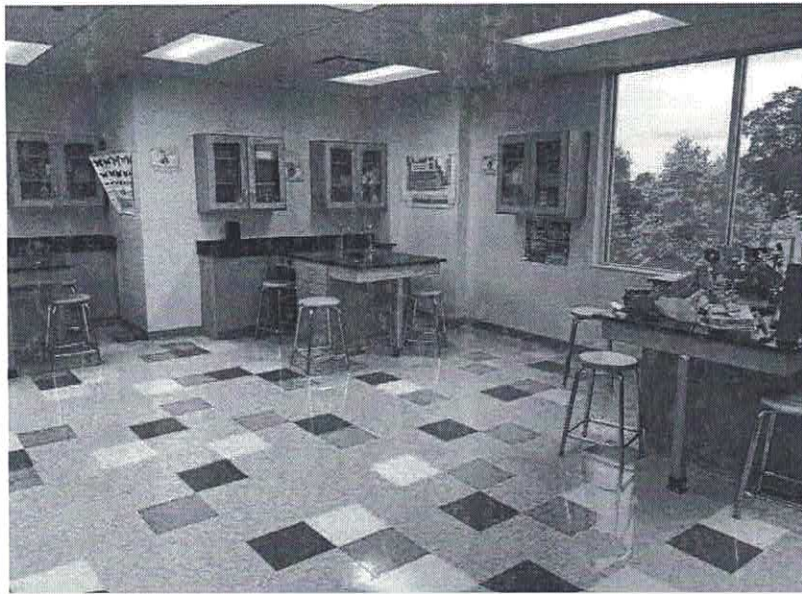
Gymnasium



**Photograph: 8**

**Description:**

Science lab



**Photographic Documentation  
4521 Longshore Avenue  
Philadelphia, Pennsylvania  
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**Photograph: 9**

**Description:**

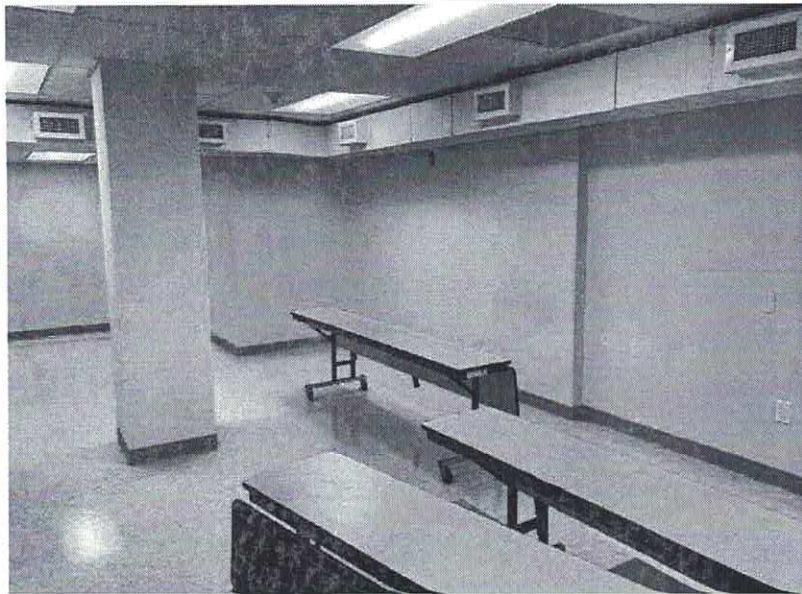
Kitchen



**Photograph: 10**

**Description:**

Cafeteria



APPENDIX C  
CLEARANCE LETTER

**VERTEX**



November 9, 2020

Keystone Academy Charter School  
4521 Longshore Avenue  
Philadelphia, PA  
Attn: Claudia Lyles

Reference: Asbestos Consulting  
4521 Longshore Avenue  
Philadelphia, PA  
VERTEX Project #67005

Dear Ms. Lyles:

In October 2020, The Vertex Companies, Inc (VERTEX) was retained by Keystone Academy Charter School to provide asbestos consulting services associated with an asbestos removal project at 4521 Longshore Avenue Philadelphia, Pennsylvania. Removal operations concluded on October 30, 2020.

Specifically, VERTEX was retained to perform clearance air sampling after the removal of approximately 10 LF of remnant tar on stone façade on the exterior wall facing the parking lot of the abovementioned address. Final air testing was performed on October 30, 2020.

Analysis was performed via Phase Contrast Microscopy (PCM). Results of air tests yielded levels below 0.01 F/cc, the EPA recommended level for clean air.

All air samples were collected and analyzed in accordance with the National Institute of Safety and Health (NIOSH) Analytical Method #7400, "Asbestos Fibers in Air," using A counting rules for Phase Contrast Microscopy (PCM).

If you should have any questions or require further information, please feel free to contact me.

Sincerely,  
**The Vertex Companies, Inc.**

  
Joseph Anello, ENV SP  
Division Manager

Keystone Academy Charter School  
4521 Longshore Avenue  
Philadelphia, PA

Sample #	Sample Location/Activity	Volume (L)	Fibers/100 Fields	Sample Result (F/cc)
Date collected: 10/30/20				
Site Activity/Work Area: PCM Final Clearance Sampling				
10.30.01	Final: North work area	780	5	<0.003
10.30.02	Final: Down wind (north) of work area	780	2	<0.003
10.30.03	Blank	-	0	-