

Asbestos & Lead Based Paint Assessment

City of Spartanburg 654 West Main Street; Building 2 Spartanburg, South Carolina 29301

Prepared for:

The City of Spartanburg 440 South Church St., Suite B Spartanburg, South Carolina 29306

Prepared by:

Apex Environmental Management, Inc. 7 Winchester Court Mauldin, South Carolina 29662

Project Number: 0521-99

May 25, 2021





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Apex Project Number 0521-99

May 25, 2021

Mr. Jeff Tillerson City of Spartanburg 440 South Church Street, Suite B Spartanburg, SC 29306

Reference: Asbestos and Lead-Based Paint Assessment Services

654 West Main Street; Building 2 Spartanburg, South Carolina 29301

Dear Mr. Tillerson:

Apex Environmental Management, Inc. (Apex) is pleased to provide the results of our assessment services for the referenced property.

This report and the associated attachments summarize our evaluation of the conditions observed at the project site. The findings presented by Apex are based upon sampling performed in the subject building. There is a chance that undetected ACM may exist in the building between walls or in other areas that would only be exposed during demolition or structural renovations. Should material be discovered that could potentially contain asbestos during the demolition process, additional samples of the material should be collected by a licensed asbestos inspector and submitted to an accredited laboratory for analytical interpretation. Our recommendations are based on the guidelines presented in EPA and/or OSHA regulations.

Please note that this document is not a specification for asbestos removal. It does not contain means and methods for abatement. Quantities are estimates and contractors must verify amounts prior to bidding or removal. If you are planning an abatement project, please contact Apex to discuss the requirements. Use of this document without the express written consent of Apex is at the sole risk of the user and or/abatement contractor.

The conclusions and/or recommendations contained in this report are based on our understanding of the applicable standards at the time this report was prepared. No warranty, expressed or implied, is made. If you have any questions please feel free to contact us at (864) 404-3210.

Respectfully submitted,

APEX ENVIRONMENTAL MANAGEMENT, INC.

Tom Oliver Vice President

Appendices

ASBESTOS AND LEAD BASED PAINT ASSESSMENT

CITY OF SPARTANBURG 654 WEST MAIN STREET; BUILDING 2 SPARTANBURG, SOUTH CAROLINA 29301

APEX PROJECT NO. 0521-99

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SECTION I

Asbestos & Lead Evaluation Report

ASBESTOS EVALUATION REPORT APEX PROJECT NUMBER: 0521-99

Date: 5/25/2021 Page Number: 1 of 4

Client: City of Spartanburg Client Contact: Mr. Jeff Tillerson

Client 440 South Church Street Client Phone (864) 596-2911

Address: Suite B Number:

Spartanburg, SC 29306

Project: Asbestos Evaluation and

Lead Based Paint Assessment

Property 654 West Main Street;

Address: Building 2

Spartanburg, SC 29301

Assessor: Stephanie Hamby Date of 4/30/2021

Assessment:

Company: Apex Environmental Management

7 Winchester Court

Mauldin, SC 29662

Purpose of Demolition Age of Approximately 65 years

Phone

Number:

Assessment: Structure:

Building Commercial Number of 1
Type: Stories:

Foundation: Slab-on Grade Approximate 1,725 SF

Square
Footage

South Grade

Approximate

1,72

EXTERIOR BUILDING MATERIALS

- Front flat built-up tar & gravel roof system with tar & shingle flashing on the parapet wall & stone.
- Back pitched wooden roof with shingles & felt
- Brick siding & CMU block siding with stucco. Wooden & vinyl siding over OSB siding with a felt paper layer.
- Exterior caulk on stucco and brick siding & plywood siding.
- Metal windows & doors with caulks.

INTERIOR BUILDING MATERIALS

• Drywall with joint compound walls & ceilings in the bathrooms & back area.

(864) 404-3210

- Concrete ceilings.
- 2' x 4' ceiling tiles in the front area.
- CMU block & wooden wall panel walls.
- 9" x 9" brown floor tile & brown mastic in the front area.
- Multiple types & layers of vinyl flooring with & without mastics/adhesives behind the bar area.
- Large amounts of items, trash & debris exists.

City of Spartanburg 654 West Main Street; Building 2 Apex Project No. 0521-99 May 25, 2021

SCOPE OF THE SURVEY

The objectives of the asbestos and lead assessment included the following:

- Identification of suspect asbestos-containing material (ACM) and lead based paints (LBP) in readily observable locations. Limited demolition of building finishes was conducted.
- Asbestos survey with sample collection by a South Carolina accredited inspector.
- Suspect ACM analysis by polarized light microscopy (PLM) utilizing EMSL Analytical, Inc. (EMSL) as an NVLAP certified laboratory, their accreditation number is 200841-0.
- Transmission electron microscopy (TEM) analysis of non-friable organically bound materials suspected to contain asbestos and testing negatively by PLM analysis.
- Lead inspection by a lead inspector certified by the Environmental Protection Agency and licensed to conduct LBP surveys in South Carolina.
- In situ analysis of suspected lead based paints by X-ray fluorescence (XRF).
- Presenting the results in a report identifying confirmed ACMs and LBPs.

METHODS

Asbestos Containing Materials

In order to determine if the suspect materials observed during the visual survey contained asbestos, representative bulk samples were collected and placed in sealed packages. Forty-one (41) bulk samples were collected during the survey and submitted to EMSL in Pineville, North Carolina for analysis using the EPA recommended method of Polarized Light Microscopy (PLM) coupled with dispersion staining (Method No. EPA 600/M4-82-020, Dec. 1982). EMSL participates in the National Voluntary Laboratory Accreditation Program (NVLAP). Their NVLAP accreditation number is 200841-0. EPA regulations require that multiple samples of each homogeneous material be collected for laboratory analysis. Forty-seven (47) samples were analyzed due to layering by PLM and positive stop methods. In accordance with South Carolina Regulation 61-86.1, non-friable organically bound materials that are reported to be non-asbestos containing by PLM analysis must also be analyzed by Transmission Electron Microscopy (TEM). Eleven (11) samples were analyzed using TEM.

Lead-Based Paint

Lead painted surfaces were analyzed in place using X-ray fluorescence. Painted surfaces were selected based on color of topcoat, underlying layers and substrate on which it was painted.

RESULTS

Asbestos Results

The EPA defines an asbestos-containing material (ACM) as a material containing more than 1% asbestos. It should be noted that materials were identified to contain less than 1% asbestos and OSHA Construction Industry Asbestos Standards (29 CFR 1926.1101) will apply if those materials are disturbed during renovation or demolition activities. Provided below is a general discussion of the asbestos containing materials identified in the residence. A specific *PLM and TEM Data Table* is located in Appendix II of this report and identifies positive materials and designates approximate quantities.

City of Spartanburg 654 West Main Street; Building 2 Apex Project No. 0521-99 May 25, 2021

Suspect asbestos containing materials that were identified to be asbestos containing include:

- Approximately 75 LF of gray caulk on exterior brick siding and stucco.
- Approximately 1 metal door on the left side of the building with gray caulk.
- Approximately 170 SF green square and rectangle pattern vinyl floor in the front side of the left area.
- Approximately 1,225 SF built-up tar and gravel roof system.
- Approximately 175 SF of tar and shingle flashing on the flat roof parapet walls and stone.
- Approximately 550 SF 9" x 9" brown floor tile in the front area.

Lead Based Paint

OSHA does not recognize a threshold level of lead for definition purposes, only the presence or absence of lead. The current OSHA regulations recognize an airborne action level of thirty micrograms per cubic meter ($30 \mu g/m^3$) during an eight-hour workday and a permissible exposure level of fifty micrograms per cubic meter ($50 \mu g/m^3$) for employees.

Currently, EPA defines LBP as paint containing in excess of, or equal to, 1.0 mg/cm². XRF LBP Data Sheets providing XRF results for testing combinations can be found in the Appendices at the conclusion of this report. Paint-chip sampling was not required for XRF inconclusive values.

Two surfaces in the building tested positive for lead in excess of the regulatory definition:

- Exterior gray brick walls.
- Interior blue angle iron on top of walls.

RECOMMENDATIONS AND DISCUSSION

Asbestos Containing Materials

If the above referenced asbestos materials are to be disturbed by renovations or demolition, the asbestos must be removed in accordance with EPA, State of South Carolina and OSHA asbestos regulations. The State of South Carolina, Department of Health and Environmental Control (DHEC) has specific regulations that must be adhered to during asbestos removal/abatement projects.

APEX recommends the following:

- 1. Abate the asbestos containing materials in the structure prior to renovation or demolition.
- 2. Follow applicable asbestos regulations during renovation or demolition of the structure. You should be aware that stringent requirements are imposed upon anyone renovating or demolishing a structure in which ACM will be disturbed. This work must be performed in accordance with OSHA asbestos regulations, 29 CFR 1910 & 1926, and NESHAP asbestos regulations 40 CFR 61, subpart M. South Carolina regulations require the accreditation of personnel who work in the asbestos field and notification and permitting fees for asbestos removal projects. There is a 10 working day notification period required prior to abatement of asbestos in a facility. Failure to take proper precautions and actions to protect human health

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and the environment can result in penalties, danger to personnel, and construction delays.

Lead-Based Paint

Currently the Environmental Protection Agency (EPA) define LBP as paint containing greater than 1.0 milligrams per square centimeter (mg/cm²) lead or in excess of, or equal to, 0.5 percent lead. Building materials identified as being painted with LBP should be segregated from the other building materials and recycled or disposed of in a municipal lined landfill. The removed wastes would need to be containerized and further tested by Toxic Characteristic Leaching procedures (TCLP) to determine if the waste is classified as hazardous. The remaining building materials that are not painted with LBP may be disposed of in a construction and demolition landfill. However, the landfills should be contacted to determine their specific disposal requirements.

Occupational Safety and Health Administration Lead Regulations apply to actions initiated on lead containing materials. This regulation applies to lead concentrations greater than the analytical limit of detection. This regulation sets exposure levels on airborne lead and does not reference the percent lead in paint. Therefore, initial personal air monitoring should be conducted on workers performing work on surfaces which have a lead concentration of 0.1 mg/ cm² or above to satisfy the OSHA requirements. If a baseline exposure lower than the OSHA Action Level of 30 micrograms per cubic meter (μ g/m³) is established, personal air monitoring may be terminated. The full OSHA lead standard should be referenced for compliance.

A copy of this report must be submitted to SCDHEC at least ten (10) working days prior to demolition when applying for a demolition permit.

SECTION II Asbestos & LBP Data Tables

ASBESTOS SURVEY FIELD DATA SHEET PLM & TEM ANALYSIS

Project Name: COS 654 West Main Street ACM-LBP (Building 2) Sampled By: Stephanie Hamby

Project Location: 654 West Main Street, Spartanburg, South Carolina 29301 Project Manager: Tom Oliver

Project Number: 0521-99 Date: 4/30/2021

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
1						
2	Exterior siding/walls	Stucco over CMU blocks	PLM - NAD	Friable	Good	175 SF
3						
4]					
5	Exterior siding & stucco	Gray caulk	PLM - 7% chrysotile	Non-Friable	Good	75 LF
6						
7 8	Metal windows	Black caulk over tan caulk	PLM - NAD	Non-Friable	Good	2 EA
9	1		TEM - NAD	1		
10						
11	Metal door on right side	Gray caulk	PLM - 10% chrysotile	Non-Friable	Good	1 EA
12	1		-			
13			DIAM NAD			
14	Wooden plywood siding on left side White hard caulk	PLM - NAD	Non-Friable	Good	50 LF	
15	1		TEM - NAD			
16		D 114 4 0 1 6				
17	Flat roof	Built-up tar & gravel roof system	PLM - 6% chrysotile	Non-Friable	Good	1,225 SF
18		System				
19			PLM - 6% chrysotile (tar)			
20	Flat roof parapet walls & stone	Tar & shingle flashing	NAD (shingle)	Non-Friable	Good	175 SF
21			TEM - NAD (shingle)			
22		Poof chingles (1 layer) 9	PLM - NAD			
23	Back pitched wooden roof	Roof shingles (1 layer) & felt (1 layer)	I LIVI - IVAD	Non-Friable	Good	600 SF
24		ion (inagor)	TEM - NAD			

ASBESTOS SURVEY FIELD DATA SHEET PLM & TEM ANALYSIS

Project Name: COS 654 West Main Street ACM-LBP (Building 2) Sampled By: Stephanie Hamby

Project Location: 654 West Main Street, Spartanburg, South Carolina 29301 Project Manager: Tom Oliver

Project Number: 0521-99 Date: 4/30/2021

Sample No.	Location	Sample Description	Analytical Results	Friable/Non Friable	Condition	Quantity
25			PLM - NAD			
26	Beneath wooden & vinyl siding	Felt paper	T EW TWO	Non-Friable	Good	600 SF
27			TEM - NAD			
28		Oll vs Oll brown floor tile 9	PLM - 8% chrysotile (floor tile)			
29	Front area	9" x 9" brown floor tile & brown mastic	NAD - (mastic)	Non-Friable	Good	550 SF
30		Diowii iliastic	TEM - 0.56% chrysotile (mastic)		1	
31						
32		Drywall with joint compound	PLM - NAD	Friable	Good	1,300 SF
33						
34	ceilings	& tape				
35						
36		AA IC I I C II C I	PLM - NAD			
37	Behind bar area	Multiple layers of roll vinyl flooring & adhesives	PLIVI - NAD	Non-Friable	Good	125 SF
38		nooning & aunesives	TEM - NAD			
39						
40	Front area	2' x 4' ceiling tiles	PLM - NAD	Friable	Good	32 SF
41						

NAD = No Asbestos Detected

LF = Linear Feet

EA = Each

Bold = Positive For Asbestos

SF = Square Feet

Chry = Chrysotile

FIELD DATA SHEET XRF LBP ANALYSIS

Project Name: COS 654 West Main Street ACM-LBP (Building 2) Sampled By: Stephanie Hamby

Project Location: 654 West Main Street, Spartanburg, SC 29301 Project Manager: Tom Oliver

Project Number: 0521-99 Date: 4/30/2021

Sample No.	Sample Location	Component	Color	Substrate	Analytical Result (mg/m³)		
44	Exterior	Window/door bars	White	Metal	0.00		
45	Exterior	Wall	Gray	Brick	1.28		
46	Exterior	Wall/stucco	Gray	CMU block	0.00		
47	Exterior	Soffit/fascia	White	Wood	0.00		
48	Exterior	Siding patch	White	Wood	0.00		
49	Exterior	Siding patch	White	Wood	0.00		
50	Exterior	Corner trim	White	Wood	0.00		
51	Exterior	Door	White	Metal	0.93		
52	Interior	Wall	Tan	CMU block	0.00		
53	Interior	Wall	Tan	Wooden panel	0.00		
54	Interior	Floor	Peach	Concrete	0.00		
55	Interior	Bar foot rest	Burgundy	Wood	0.00		
56	Interior	Bar	Black	Wood	0.00		
57	Interior	Wall	Black	Wooden panel	0.00		
58	Interior	Wall	Black	CMU block	0.08		
59	Interior	Wall	White	Drywall	0.00		
60	Interior	Wall	Tan	Drywall	0.00		
61	Interior	Angle iron on top of wall	Blue	Metal	1.14		
62	Interior	Ceiling	White	Drywall	0.00		
63	Interior	Wall	White	Wooden panel	0.00		
64	Interior	Wall	White	CMU block	0.12		
65	Interior	Wall	White	Wooden panel	0.00		
66		Calibration					
67		Calibration			1.12		
68		Calibration			1.09		

Bold = LBP

FFM = Factory Finished Metal

FFV = Factory Finished Vinyl

SECTION III

Laboratory Analytical Results & Chain of Custody



EMSL Order: 412103731 **Customer ID:** AXEM25

Customer PO:

Project ID: City of Spartanburg

Attention: Tom Oliver Phone: (864) 640-5274

Apex Environmental Management Fax:

7 Winchester Court Received Date: 05/05/2021 9:35 AM Mauldin, SC 29662 Analysis Date: 05/10/2021 - 05/11/2021

Collected Date:

Project: 0421-COS 654 West Main Street; Bldg. #2 ACM/LBP (City of Spartanburg)

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

_			Non-As		Asbestos
ample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
	Stucco over CMU Block	Gray Non-Fibrous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
2103731-0001		Homogeneous			
2103731-0002	Stucco over CMU Block	Gray Non-Fibrous Homogeneous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
	Stucco over CMU	Gray		10% Quartz	None Detected
	Block	Non-Fibrous		20% Ca Carbonate	None Detected
12103731-0003		Homogeneous		70% Non-fibrous (Other)	
	Exterior Gray Caulk	Gray Non-Fibrous		20% Ca Carbonate 73% Non-fibrous (Other)	7% Chrysotile
12103731-0004		Homogeneous		73% Non-librous (Other)	
	Exterior Gray Caulk				Positive Stop (Not Analyzed)
2103731-0005					
-Black Caulk	Black Caulk over Tan Caulk	Black Non-Fibrous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
12103731-0006		Homogeneous			
-Tan Caulk	Black Caulk over Tan Caulk	Tan/White Non-Fibrous		15% Ca Carbonate 85% Non-fibrous (Other)	None Detected
12103731-0006A		Homogeneous			
-Black Caulk	Black Caulk over Tan Caulk	Black Non-Fibrous		100% Non-fibrous (Other)	None Detected
12103731-0007		Homogeneous			
-Tan Caulk	Black Caulk over Tan Caulk	Tan Non-Fibrous		5% Ca Carbonate 95% Non-fibrous (Other)	None Detected
12103731-0007A		Homogeneous			
0	Right Side - Gray Metal Door Caulk	Gray Non-Fibrous		15% Ca Carbonate 75% Non-fibrous (Other)	10% Chrysotile
12103731-0008		Homogeneous			
1	Right Side - Gray Metal Door Caulk				Positive Stop (Not Analyzed)
2103731-0009					
3	White Hard Siding Caulk - Plywood	White Non-Fibrous		30% Ca Carbonate 70% Non-fibrous (Other)	None Detected
12103731-0010		Homogeneous			
4	White Hard Siding Caulk - Plywood	White Non-Fibrous		10% Ca Carbonate 90% Non-fibrous (Other)	None Detected
2103731-0011	<u> </u>	Homogeneous		. ,	
6	Flat Built Up Tar & Gravel Roof System	Black Non-Fibrous		94% Non-fibrous (Other)	6% Chrysotile
12103731-0012	·	Homogeneous			
7	Flat Built Up Tar & Gravel Roof System				Positive Stop (Not Analyzed)
12103731-0013	<u> </u>				
9-Tar	Tar & Shingle Flashing on Parapet	Black Non-Fibrous		15% Ca Carbonate 79% Non-fibrous (Other)	6% Chrysotile
12103731-0014	Roof & Stone	Homogeneous			

EMSL Order: 412103731 Customer ID: AXEM25

Customer PO:

Project ID: City of Spartanburg

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

			Non-Asbes	<u>stos</u>	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
9-Shingle	Tar & Shingle Flashing on Parapet Roof & Stone	Red/Black Non-Fibrous	10% Glass	8% Quartz 15% Ca Carbonate	None Detected
12103731-0014A		Homogeneous		67% Non-fibrous (Other)	Desilies Obser (Net Assets and I
20-Tar 12103731-0015	Tar & Shingle Flashing on Parapet Roof & Stone				Positive Stop (Not Analyzed)
		0/D/D	50/ Ol	AFW Owner	Name Batastad
20-Shingle 12103731-0015A	Tar & Shingle Flashing on Parapet Roof & Stone	Gray/Red/Black Fibrous Heterogeneous	5% Glass	15% Quartz 15% Ca Carbonate 65% Non-fibrous (Other)	None Detected
				, , ,	None Betested
2-Shingle	Roof Shingles (1 Layer) & Felt (1 Layer)	Red/Black Non-Fibrous Homogeneous		8% Quartz 15% Ca Carbonate 77% Non-fibrous (Other)	None Detected
	· · ·	-	750/ 0 - 11 - 1	, , ,	None Betested
2-Felt 12103731-0016A	Roof Shingles (1 Layer) & Felt (1 Layer)	Black Fibrous Homogeneous	75% Cellulose	25% Non-fibrous (Other)	None Detected
	, , , , , , , , , , , , , , , , , , ,	-	50/ Ol	AFRY Owner	None Betested
23-Shingle 12103731-0017	Roof Shingles (1 Layer) & Felt (1 Layer)	Gray/Red/Black Fibrous Homogeneous	5% Glass	15% Quartz 15% Ca Carbonate 65% Non-fibrous (Other)	None Detected
			65% Cellulose	, , ,	None Detected
23-Felt 12103731-0017A	Roof Shingles (1 Layer) & Felt (1 Layer)	Black Non-Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
	Felt Layer on Wooden	Brown	98% Cellulose	2% Non-fibrous (Other)	None Detected
.5 12103731-0018	Siding (Felt Only)	Fibrous Homogeneous	98% Cellulose	2% Non-fibrous (Other)	None Detected
	Calt Lavian an Mandan	-	CEN/ Callulana	250/ Non-Sharas (Others)	Name Detected
6 12103731-0019	Felt Layer on Wooden Siding (Felt Only)	Black Fibrous Homogeneous	65% Cellulose	35% Non-fibrous (Other)	None Detected
	01 01 D Fl	-		000/ 0- 0	00/ 01
8-Floor Tile	9"x9" Brown Floor Tile & Brown Mastic	Brown Non-Fibrous Homogeneous		30% Ca Carbonate 62% Non-fibrous (Other)	8% Chrysotile
	9"x9" Brown Floor Tile	Tan		5% Ca Carbonate	None Detected
8-Mastic	& Brown Mastic	Non-Fibrous Homogeneous		95% Non-fibrous (Other)	None Detected
9-Floor Tile	9"x9" Brown Floor Tile	Homogeneede			Positive Stop (Not Analyzed)
9-F1001 THE 12103731-0021	& Brown Mastic				Fositive Stop (Not Arialyzeu)
9-Mastic	9"x9" Brown Floor Tile	Tan	<1% Cellulose	100% Non-fibrous (Other)	None Detected
12103731-0021A	& Brown Mastic	Non-Fibrous Homogeneous	1770 Cellulose	100 % North Indicate (Outlet)	None Beledicu
1-Drywall	Drywall w/ Joint Compound	Gray Non-Fibrous	8% Cellulose	92% Non-fibrous (Other)	None Detected
12103731-0022	· 	Homogeneous			
1-Joint Compound	Drywall w/ Joint Compound	White Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
12103731-0022A	·	Homogeneous			
1-Tape	Drywall w/ Joint Compound	Tan Non-Fibrous	99% Cellulose	1% Non-fibrous (Other)	None Detected
12103731-0022B		Homogeneous			
2-Drywall	Drywall w/ Joint Compound	Gray Non-Fibrous	8% Cellulose	92% Non-fibrous (Other)	None Detected
12103731-0023		Homogeneous			
2-Joint Compound	Drywall w/ Joint Compound	White Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
12103731-0023A		Homogeneous			
32-Tape	Drywall w/ Joint Compound	Tan Fibrous	99% Cellulose	1% Non-fibrous (Other)	None Detected
412103731-0023B		Homogeneous			

EMSL Order: 412103731 Customer ID: AXEM25

Customer PO:

Project ID: City of Spartanburg

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

			Non-Asbesto	<u>s</u>	<u>Asbestos</u>
Sample	Description	Appearance	% Fibrous	% Non-Fibrous	% Type
33-Drywall 412103731-0024	Drywall w/ Joint Compound	Gray Fibrous Homogeneous	10% Cellulose	90% Non-fibrous (Other)	None Detected
33-Joint Compound	Drywall w/ Joint Compound	White Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
412103731-0024A		Homogeneous			
33-Tape 412103731-0024B	Drywall w/ Joint Compound	Tan Fibrous Homogeneous	100% Cellulose		None Detected
	Drywall w/ Joint	Gray	8% Cellulose	92% Non-fibrous (Other)	None Detected
34-Drywall 412103731-0025	Compound	Non-Fibrous Homogeneous	0 /0 Geliulose	92 % Non-librous (Other)	None Detected
34-Joint Compound 412103731-0025A	Drywall w/ Joint Compound	White Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
34-Tape	Drywall w/ Joint Compound	Homogeneous Tan Non-Fibrous	99% Cellulose	1% Non-fibrous (Other)	None Detected
412103731-0025B		Homogeneous			
35-Drywall	Drywall w/ Joint Compound	Gray Fibrous	10% Cellulose	90% Non-fibrous (Other)	None Detected
412103731-0026		Homogeneous			
35-Joint Compound	Drywall w/ Joint Compound	White Non-Fibrous		40% Ca Carbonate 60% Non-fibrous (Other)	None Detected
412103731-0026A		Homogeneous			
35-Tape	Drywall w/ Joint Compound	Tan Fibrous	100% Cellulose		None Detected
412103731-0026B	Maddala Lavara of	Homogeneous		00/ 0- 0-4	None Betested
36-Flooring 412103731-0027	Multiple Layers of Vinyl Floors & Adhesive	Tan Non-Fibrous Homogeneous		8% Ca Carbonate 92% Non-fibrous (Other)	None Detected
No mastic present					
36-Subflooring	Multiple Layers of Vinyl Floors &	Brown Non-Fibrous	80% Cellulose	20% Non-fibrous (Other)	None Detected
412103731-0027A	Adhesive	Homogeneous			
37-Flooring	Multiple Layers of Vinyl Floors &	Brown/Beige Non-Fibrous	3% Glass	10% Ca Carbonate 87% Non-fibrous (Other)	None Detected
412103731-0028 Only one mastic present	Adhesive	Homogeneous			
37-Subflooring	Multiple Layers of Vinyl Floors &	Brown Non-Fibrous	50% Cellulose	50% Non-fibrous (Other)	None Detected
412103731-0028B	Adhesive	Homogeneous			
37-Mastic	Multiple Layers of Vinyl Floors &	Tan/Black Non-Fibrous	5% Fibrous (Other)	5% Ca Carbonate 90% Non-fibrous (Other)	None Detected
412103731-0028C	Adhesive	Homogeneous			
39	2'x4' Ceiling Tiles	Brown Fibrous	95% Cellulose	5% Non-fibrous (Other)	None Detected
412103731-0029		Homogeneous			
40	2'x4' Ceiling Tiles	Brown Non-Fibrous	95% Cellulose	5% Non-fibrous (Other)	None Detected
412103731-0030		Homogeneous			
41	2'x4' Ceiling Tiles	Brown/White Fibrous	90% Cellulose	10% Non-fibrous (Other)	None Detected
412103731-0031		Homogeneous			



EMSL Order: 412103731 Customer ID: AXEM25

Customer PO:

Project ID: City of Spartanburg

Analyst(s)

Eric Loomis (19) Sarah Breneman (28) Lee Plumley, Laboratory Manager or Other Approved Signatory

Evan L Plumber

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. Pineville, NC NVLAP Lab Code 200841-0, VA 3333 00312

EMSL Order: 412103731 **Customer ID:** AXEM25

Customer PO:

Collected Date:

Project ID: City of Spartanburg

Attention: Tom Oliver Phone: (864) 640-5274

Apex Environmental Management Fax:

7 Winchester Court Received Date: 05/05/2021 9:35 AM

Mauldin, SC 29662 **Analysis Date:** 05/12/2021

Project: 0421-COS 654 West Main Street; Bldg. #2 ACM/LBP (City of Spartanburg)

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID	Description	Appearance	% Matrix Material	% Non-Asbestos Fibers	Asbestos Types
9-Black Caulk 412103731-0032	Black Caulk over Tan Caulk	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
9-Tan Caulk 412103731-0033	Black Caulk over Tan Caulk	Tan Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
15 412103731-0034	White Hard Siding Caulk - Plywood	Gray Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
21-Shingle 412103731-0035	Tar & Shingle Flashing on Parapet Roof & Stone	Red Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
24-Shingle 412103731-0036	Roof Shingles (1 Layer) & Felt (1 Layer)	Red Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
24-Felt 412103731-0037	Roof Shingles (1 Layer) & Felt (1 Layer)	Black Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
27 412103731-0038	Felt Layer on Wooden Siding (Felt Only)	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
30-Mastic 412103731-0039	9"x9" Brown Floor Tile & Brown Mastic	Tan Non-Fibrous Homogeneous	100.0 Other	None	<0.56% Chrysotile
38-Flooring 412103731-0040	Multiple Layers of Vinyl Floors & Adhesive	Brown Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
38-Subflooring 412103731-0041	Multiple Layers of Vinyl Floors & Adhesive	Beige Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected
38-Mastic 412103731-0042	Multiple Layers of Vinyl Floors & Adhesive	Black Non-Fibrous Homogeneous	100.0 Other	None	No Asbestos Detected

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. EMSL recommends that samples reported as none detected or <1% undergo additional analysis via PLM to avoid the possibility of false negatives.

Samples analyzed by EMSL Analytical, Inc. Pineville, NC



EMSL Order: 412103731 **Customer ID:** AXEM25

Customer PO:

Project ID: City of Spartanburg

Attention: Tom Oliver Phone: (864) 640-5274

Apex Environmental Management Fax:

7 Winchester Court Received Date: 05/05/2021 9:35 AM

Mauldin, SC 29662 Analysis Date: 05/12/2021 Collected Date:

Project: 0421-COS 654 West Main Street; Bldg. #2 ACM/LBP (City of Spartanburg)

Test Report: Asbestos Analysis of Non-Friable Organically Bound Materials by TEM via EPA/600/R-93/116 Section 2.5.5.1

Sample ID Description Appearance % Matrix Material % Non-Asbestos Fibers Asbestos Types

Analyst(s)

Derrick Young (11)

Lee Plumley, Laboratory Manager or other approved signatory

Evan L Plumber

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Samples analyzed by EMSL Analytical, Inc. Pineville, NC

OrderID: 412103731

Asbestos Bulk Building Materials - Chain of Custody

10801 Southern Loop Blvd

EMSL ANALYTICAL, INC.

EMSL Order Number / Lab Use Only

412103731

Pineville, NC 28134 PHONE: (704) 525-2205 EMAIL:

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Customer ID.			Billing 1D:				
[를 Company Name: Ape	x Environmental Ma	anagement, Inc.	Company Name:	Apex Enviro	onmental Ma	nagement,	inc.
Contact Name: Tom	n Oliver		Billing Contact -	Tom Oliver			
iii	inchester Court			<u> 7 Winchest</u>			
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Email(s) for Report: to	liver@apex-ehs.com		Email(s) for Invoice	: 			
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Controlled Document - Asbestos Bulk F	R5 03/18/2021 AGREE TO	ELECTRONIC SIGNATURE (By ch	ecking, I consent to signing	this Chain of Custody	document by electronic	c signature.)	

OrderID: 412103731

EMSL ANALYTICAL, INC.

Asbestos Bulk Building Materials - Chain of Custody

EMSL Analytical, Inc. 10801 Southern Loop Blvd

Pineville, NC 28134 PHONE: (704) 525-2205

3731

Additional Pages of the Chain of Custody are only necessary if needed for additional sample information

Special instructions and/or Regulatory Requirements (Sample Specifications, Processing Methods, Limits of Detection, etc.) Sample Number **HA Number** Sample Location Material Description 10 and siding cark Sample Condition Upon Receipt: Relinquished by: Date/Time: Received by. Date/Time Relinquished by: Date/Time: Received by: Date/Time Controlled Document - Asbestos Bulk R5 03/18/2021

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

OrderID: 412103731 EMSL ANALYTICAL, INC.

Asbestos Bulk Building Materials - Chain of Custody EMSL Order Number / Lab Use Only

EMSL Analytical, Inc. 10801 Southern Loop Blvd

Pineville, NC 28134 PHONE: (704) 525-2205 EMAIL:

Additional Pages of the Chain of Custo	dy are only necessary if needed for addition	nal sample Information	ifications, Processing Methods, Limits of		
	Special Instructions and/or	Regulatory Requirements (Sample Spec	ifications, Processing Methods, Limits of	Detection, etc.)	
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Controlled Document - Asbestos Bulk R5			Leanant to singing this Chain of Custody		

EMSL Analytical, Inc.'s Laboratory Terms and Conditions are incorporated into this Chain of Custody by reference in their entirety. Submission of samples to EMSL Analytical, Inc. constitutes acceptance and acknowledgment of all terms and conditions by Customer.

3

AGREE TO ELECTRONIC SIGNATURE (By checking, I consent to signing this Chain of Custody document by electronic signature.)

SECTION IV

Photographic Log



Photo 1 – 654 West Main Street (Building 2) in Spartanburg, South Carolina 29301



Photo 2 – Stucco over CMU blocks



Photo 3 – Stucco over CMU blocks



Photo 4 - Gray caulk on exterior siding & stucco



Photo 5 - Gray caulk on exterior siding & stucco



Photo 6 – Built up tar and gravel roof system



Photo 7 – tar & shingle flashing on the flat roof parapet walls & stone



Photo 8 – Roof shingles & felt on back pitched wooden roof



Photo 9 - Felt paper beneath wooden & vinyl siding



Photo 10 – Black caulk over tan caulk on metal windows



Photo 11 – White hard caulk on wooden plywood siding on left side



Photo 12 - 9" x 9" brown floor tile & brown mastic in the front area





Photo 14 - Typical view of the back area and drywall walls & ceilings



Photo 15 - Typical view of a bathroom and drywall walls & ceilings



Photo 16 – Multiple layers of roll vinyl flooring & adhesives behind the bar area

SECTION V

SC DHEC Asbestos Inspector License



January 8, 2021

To whom it may concern:

Due to an unforeseen printer outage the SC Department of Health and Environmental Control Asbestos Program cannot issue a Standard Asbestos License

AS-000632 exp 8/13/2021

for license number: B1-01894 exp 1/12/2022

Please accept this correspondence as a temporary acknowledgment

of Air Sampler & Building Inspector licensing status.

will be

Keep this letter with you all the time during work at the job site.

If you have any questions, please call the Asbestos Section at 803-898-4289.

Sincerely,

Jennifer Lynn Boryk Manager, Asbestos Section

Bureau of Air Quality

Jennifer Lynn Boyle